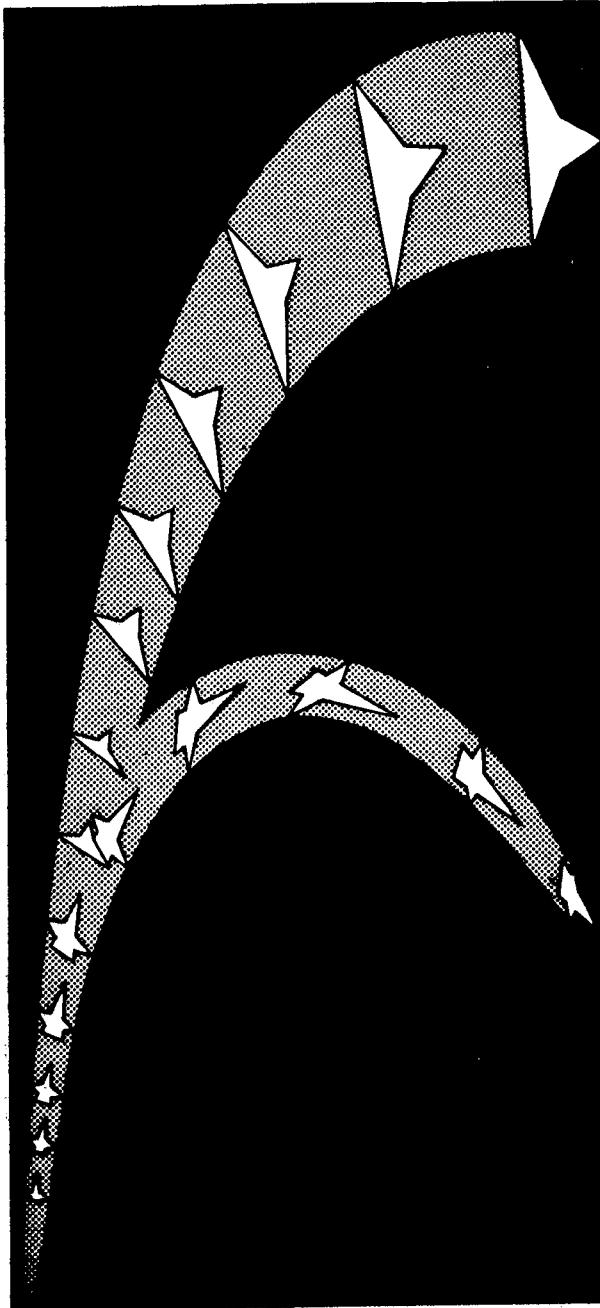


*J.P.
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DMS-DR-1174

CR-120,063

JUNE 1972



-SPACE SHUTTLE-

SPACE SHUTTLE ABORT SEPARATION PRESSURE INVESTIGATION

VOLUME IV

ORBITER DATA AT MACH

by

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AEDC-VKF TUNNEL

Arnold Engineering
Development Center

SADSAC SPACE SHUTTLE
AEROTHERMODYNAMIC
DATA MANAGEMENT SYSTEM

CONTRACT NAS8-4016
MARSHALL SPACE FLIGHT CENTER

SPACE DIVISION  CHRYSLER
CORPORATION

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CR-120,063
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SADSAC/SPACE SHUTTLE

WIND TUNNEL TEST DATA REPORT

CONFIGURATION: MDAC Orbiter and Booster Shuttle Models; 0.00556 Scale

TEST PURPOSE: Experimental Pressure Investigation of Space Shuttle Booster
and Orbiter Vehicles in Proximity at Mach Numbers of 2.0
to 5.0

TEST FACILITY: AEDC-VKF Tunnel A

TESTING AGENCY: LaRC/MSFC

TEST NO. & DATE: AEDC STS 1163; 22 through 27 July, 1971

FACILITY COORDINATOR: L. L. Trimmer, ARO; D. A. Love, IMSC/HREC

PROJECT ENGINEER(S): J. M. Rempy, NSI
J. P. Decker, LaRC
K. L. Blackwell, MSFC
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Details of illustrations in
this document may be better
studied on microfiche

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SPACE SHUTTLE ABORT SEPARATION

PRESSURE INVESTIGATION

By D. A. Love, etc.

S U M M A R Y

This report presents pressure data obtained from a joint Langley Research Center (LaRC)/Marshall Space Flight Center (MSFC) Space Shuttle abort stage separation wind tunnel test. The .00556 scale models of the McDonnell-Douglas orbiter and booster configurations were tested in proximity in Tunnel A of the Von Karman Facility (VKF), Arnold Engineering Development Center (AEDC) during the time period of July 22 to July 27, 1971. Data were obtained for nominal Mach numbers of 5.0, 3.0, and 2.0 and nominal Reynolds numbers of 1.09, 1.60, and 1.74 million per foot, respectively. Pressure data were obtained for the booster upper surface and orbiter lower surface at angles of attack of -10°, -5°, 0, 5, and 10° for zero degrees sideslip. For the complete pressure tap layout refer to figures 1 and 2 and tables II and III. The models were tested at incidence angles of 0 and 5° for several separation distances and power conditions. Plug nozzles utilizing air were used to simulate booster and orbiter plumes at various altitudes along a nominal ascent trajectory. Powered conditions were 100, 50, and 0 percent of full power for the orbiter and 100, 50 and 0 percent of full power for the booster. Data were also obtained with the booster canard off in close proximity.

Plotted data for this test will be published under one data report number (DMS-DR-1174) with six volumes as described below:

| <u>Volume</u> | <u>Description</u> |
|------------------|-------------------------------------|
| I (Parts A & B) | Mach Number 5 Booster Pressure Data |
| II (Parts A & B) | Mach Number 5 Orbiter Pressure Data |
| III | Mach Number 4 Booster Pressure Data |
| IV | Mach Number 3 Orbiter Pressure Data |
| V | Mach Number 2 Booster Pressure Data |
| VI | Mach Number 2 Orbiter Pressure Data |

NOMENCLATURE

AEDC STS 1163

| <u>SYMBOL</u> | <u>SADSAC SYMBOL</u> | <u>DEFINITION</u> |
|---------------|----------------------|--|
| a | | Speed of sound; m/sec, ft/sec |
| b/2 | | Vehicle wing semi-span; in. |
| c | | Local airfoil chord; in. |
| c.g. | | Center of gravity |
| CP | CP | Pressure coefficient, $\frac{P_L - P_\infty}{q}$ |
| L | L | Body length; in. |
| M_∞ | MACH | Free stream mach number; V/a |
| P_L | | Local static pressure; psia |
| P_0 | | Free stream total pressure; psia |
| P_∞ | | Free stream static pressure; psiu |
| q | | Dynamic pressure; psi |
| RN/L | RN/L | Unit Reynolds number; per foot |
| T_0 | | Freestream total temperature, °F |
| V | | Velocity; m/sec, ft/sec |
| x | | Distance from vehicle nose; in. |
| x/c | X/C | Local chord position |
| x/L | X/L | Longitudinal position |
| y | | Distance from lateral centerline, in. |
| y/b/2 | Y/B | Local semi-span position |

NOMENCLATURE (Continued)

AEDC STS 1163

| <u>SYMBOL</u> | <u>SADSAC SYMBOL</u> | <u>DEFINITION</u> |
|------------------|----------------------|---|
| α_B | ALPHAB | Booster angle of attack; degrees |
| α_0 | ALPHA ϕ | Orbiter angle of attack; degrees |
| α_i | ALPHAI | Incidence angle between the orbiter and booster, $\alpha_i = \alpha_0 - \alpha_B$; degrees |
| β | BETA | Angle of sideslip; degrees |
| θ | THETA | Angle measured from vehicle top centerline; degrees |
| PWR _B | BSTP ϕ W | Booster power, percent of full thrust |
| PWR _O | ϕ RBP ϕ W | Orbiter power, percent of full thrust |
| X/L _B | DELTAX | Distance between the c.g. of the orbiter and booster measured parallel to the longitudinal axis of the booster, positive when the orbiter c.g. is forward of the booster c.g., the distance has been normalized with respect to the booster fuselage length (16.184 inches) |
| Z/L _B | DELTAZ | Distance between the c.g. of the orbiter and booster measured normal to the longitudinal axis of the booster, positive when the orbiter c.g. is above the booster c.g., the distance has been normalized with respect to the booster fuselage length (16.184 inches) |

CONFIGURATIONS INVESTIGATED

The two configurations tested were the MDAC orbiter and booster, figures 3 and 4 respectively. The orbiter is basically the configuration illustrated on MDAC drawing number 255BJ0050. Modifications made on the orbiter to allow for installation of the nozzle assembly are shown in figure 3.

The booster configuration is basically the configuration designated 19A by MDAC (drawing number 256-19-0001). The body, wing, and canard of the booster model are that of configuration 19A except that the body does not have a base flare or boattail, figure 4. The vertical tails are those which were designed for the configuration designated 17 (drawing number 256-17-001).

Dimensional data for both vehicles are shown in Table IV. Figures 7, 8, and 9 are photographs showing both models and models with associated separation hardware. Figures 8 and 9 also show the trip strip installation. For Mach 5 a grit size of #26 was utilized.

NOZZLE CALIBRATION

Two plug nozzle systems were designed and fabricated to simulate the rocket exhaust plume emitting from the booster and orbiter main propulsion systems during the staging. Each nozzle was designed based on the gasdynamic simulation parameters established in Ref. 1. A variable area ratio capability was incorporated into both nozzle systems to permit the proper gasdynamic simulation of the full scale rocket exhaust plume at the various trajectory conditions of interest. Photographs of the nozzle hardware are shown in figures 10, 11 and 12.

Nozzle Calibration Test Objectives

The objectives of the nozzle calibration test were:

- o Establish, experimentally, nozzle performance characteristics for the range of area ratio settings to be used with the booster and orbiter nozzles, respectively.
- o Establish the degree of plume simulation obtained with the booster and orbiter nozzles, respectively.
- o Establish a curve (based on experimental results) of nozzle exit conditions as a function of nozzle area ratio setting.

Nozzle Calibration

Calibration testing of the booster and orbiter plug nozzles was accomplished in Tunnel C of the Arnold Engineering Development Center's Von Karman Gas Dynamics Facility. The nozzles were tested individually at a series of area ratio settings. Nozzle operating conditions (chamber pressure, P_{oj} ; and chamber temperature, T_{oj}) were maintained in a range compatible with the abort staging test conditions. A quiescent low pressure, P_b , condition was maintained in the test cell. Data recorded at each area ratio setting included: optical data to determine plume shapes; static pressure measurements on the sting surface at the nozzle exit; nozzle mass flow measurements; and pitot pressure surveys in the plume at several locations downstream of the nozzle exit plane. The various test parameters sampled at each setting were correlated during the data evaluation to establish actual nozzle performance characteristics.

In a parallel effort, analytical solutions of the nozzle flow field and associated plume were generated for various area ratio settings of the booster and orbiter models. A method of characteristics solution employing real gas thermodynamic data for air was utilized in the calculations. Analytical results for each area ratio setting included: plume shape; static pressure distribution

NOZZLE CALIBRATION
(Continued)

along sting surface; and plots of constant Mach number and constant pitot pressure contours in the plume flow field. These results formed a baseline for evaluating the experimentally measured performance of the plug nozzles.

A detailed evaluation of the calibration test results has been prepared and presented in Reference 2. Included in this reference are curves relating experimentally measured nozzle performance to nozzle area ratio settings for both booster and orbiter. These curves were utilized to set the correct nozzle area ratio for exhaust plume gasdynamic simulations during the test.

TEST PROCEDURE

Abort staging was simulated by movement of the orbiter model through a matrix of points in the booster model flow field. Vertical and axial translation of the orbiter model was provided by an electrically driven remotely controlled positioning mechanism. The general arrangement of the models in the tunnel is shown in figure 5. The orbiter positioning mechanism and the booster model support were attached to the wind tunnel angle of attack system which provided ± 10 -degree angle of attack variation for the booster-orbiter combination. Incidence angle variation was provided by manual adjustment of the orbiter sting.

The orbiter positioning mechanism provided axial translation of approximately 17 inches and vertical translation of approximately 15 inches with respect to the booster. An automatic control system allowed a series of positions to be programmed prior to a test run. The control system had provisions for 25 different X-positions and 25 different Z-positions. For these tests, however, only a maximum of 6 X-positions and 5 Z-positions were utilized. All X and Z positions except the first and last could be switched in or out of the matrix as desired.

The automatic positioning mechanism was utilized in the pitch pause mode for this test. Pressure data was obtained at pre-selected angles of attack for a given relative position after which the automatic mechanism advanced to the next matrix position. The entire matrix was covered in this manner.

Plume simulation was provided by a single torodial nozzle in each model. The nozzles were designed with variable area ratio capability to permit proper simulation of the full-scale rocket plume at the various trajectory conditions of interest. Pretest calibration of the nozzles was used to correlate area ratio settings with measured plume shapes, nozzle mass flow, and nozzle exit static pressure. Air heated to approximately 100°F was supplied to the nozzles, and separate controls for the booster and orbiter supplies were provided.

TEST FACILITY DESCRIPTION

Tunnel A is a continuous, closed-circuit, variable density wind tunnel with an automatically driven flexible-plate-type nozzle and a 40- by 40-inch test section. The tunnel can be operated at Mach numbers from 1.5 to 6 at maximum stagnation pressures from 29 to 200 psia, respectively, and stagnation temperatures up to 750°R ($M_\infty = 6$). Minimum operating pressures range from about one-tenth to one-twentieth of the maximum at each Mach number. For a more comprehensive description of Tunnel A, see Reference 3.

DATA REDUCTION

The DELTAX and DELTAZ distances were referenced to nominal center of gravity locations on the orbiter and booster and to the booster body axis system. The nominal c.g. for the orbiter was located 4.917 inches aft of the nose, on the orbiter lateral centerline, and 1.390 inches below the top fuselage surface. Nominal c.g. for the booster was 7.528 inches aft of the model nose, on the booster lateral centerline, and 1.194 inches above the bottom fuselage surface. As illustrated in figure 6, the DELTAX distance is, then, parallel to the longitudinal axis of the booster and between the nominal center of gravity points on the orbiter and booster. The DELTAZ is perpendicular to the longitudinal axis of the booster and is the distance between the center of gravity points on the orbiter and booster. Values for DELTAX and DELTAZ are positive when the orbiter c.g. is forward and above the booster c.g. Both DELTAX and DELTAZ were normalized using the booster fuselage length of 16.184 inches.

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1. Sims, Joseph L., "Plume Simulation for Space Shuttle Abort Staging Aerodynamic Testing," Memo S&E-AERO-AF-70-6, December 1970.
2. Baker, L. R., "Calibration of the Propulsion Simulation Nozzles for the Space Shuttle Booster and Orbiter Models for the Abort/Separation Staging Experimental Program," LMSC/HREC D225144, June 1971.
3. "Test Facilities Handbook" (8th Edition), Arnold Engineering Development Center, December 1969.

TABLE I

TEST AEDC 1163 PRESSURE DATASET COLLATION SHEET

PRETEST
 POSTTEST

Refer to page 14 for DELTAX schedules.

NOTES:

- (1)-Characters A through I refer to booster body, upper wing, lower wing, canard, & base, and orbiter body, upper wing, lower wing, & base, respectively.
- (2)-Characters 1 through 5 refer to angles of attack of -10, -5, 0, +5, & +10 degrees, respectively.

| α or β | SCHEDULES |
|---------------------|---------------------|
| A(α) = | -10, -5, 0, +5, +10 |
| B(α) = | -5, 0, +5 |

TABLE I (Continued)

TEST AEDC 1163 PRESSURE DATASET COLLATION SHEET

PRETEST
 POSTTEST

| DATASET IDENTIFIER | CONFIGURATION | SCHD. | | | | PARAMETER VALUES OF RUNS | NO. .105 | DELTAX |
|---------------------------------|---------------|----------------|----------------|-------------|--|--------------------------------|-------------|---------|
| | | P ₀ | T ₀ | M | α _i P _{WRF} , P _{WRF} | | | |
| (1) T831 (2) BOOSTER/ORBITER | T832 | A | 0° | 11.5 120 | 3.0 0° | 50 100 | 70 70 | D D |
| | T833 | A | ↓ | ↓ | ↓ | 0° 0° | 55 15 | D H |
| (1) T821 (2) BOOSTER/ORBITER | T822 | A | 0° | 7.5 120 | 2.0 0° | 50 100 | 55 55 | D D |
| | T823 | A | ↑ | ↑ | ↑ | 0° 0° | 0 15 | D G |
| | T824 | A | ↑ | ↑ | ↑ | 0° 0° | 0 15 | H |
| | T825 | B | ↑ | ↑ | ↑ | 5° 5° | 50 100 | D D |
| | T826 | B | ↑ | ↑ | ↑ | 5° 0° | 0 18 | D D |
| | T827 | A | ↑ | ↑ | ↑ | 0° 0° | 100 100 | 15 5 |
| (1) T8013 BOOSTER/ORBITER | ↓ T8023 | 0° | 0° | - | - | 5° 5° | 0 0 | I B |
| | | 0° | 0° | - | - | 0.0 0.0 | 100 100 | 12 6 |

Refer to page 14 for DELTAX schedules.

Refer to page 14 for DELTAX schedules.

NOTES:

- (1)-Characters A through I refer to booster body, upper wing, lower wing, canard, & base, and orbiter body, upper wing, lower wing, & base, respectively.
- (2)-Characters 1 through 5 refer to angles of attack of -10, -5, 0, +5, & +10 degrees, respectively.

α or β
SCHEDULES
 $A(\alpha) = -10, -5, 0, +5, +10$
 $B(\alpha) = -5, 0, +5$

TABLE I (Continued)

DELTAX Schedules

| DELTAX Value | DELTAX Schedule | 0.520 | 0.350 | 0.227 | 0.165 | 0.104 | 0.041 | -0.020 | -0.144 | -0.291 | -0.391 |
|-----------------|--------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| A | | X | | X | X | X | | | | | |
| B | | X | | X | | X | | X | | X | |
| C | X | | | | | | | | | | |
| D | | | X | | | X | | | | | |
| E | | | | X | X | X | | | X | | |
| F | | | | | X | | | | | | |
| G | X | | | | | | | | | | |
| H | | | | X | X | X | | | X | | |
| I | | | | | | | | | | X | |

TABLE II
ORBITER PRESSURE TAP LOCATIONS

| Tap No. | TAP LOCATION | | | Tap No. | TAP LOCATION | | |
|---------|--------------|-------------|------------|---------|--------------|-------------|------------|
| | $(x/L)_o$ | $(y/b/2)_o$ | Surface | | $(x/L)_o$ | $(y/b/2)_o$ | Surface |
| 1 | 0 | 0 | Lower Body | 28 | .498 | .231 | Lower Body |
| 2 | .019 | | | 29 | .586 | | |
| 3 | .066 | | | 30 | .674 | | |
| 4 | .145 | | | 31 | .762 | | |
| 5 | .233 | | | 32 | .854 | | |
| 6 | .321 | | | 33 | .944 | | |
| 7 | .409 | | | 34 | .674 | .400 | Lower Wing |
| 8 | .498 | | | 35 | .762 | | |
| 9 | .586 | | | 36 | .854 | | |
| 10 | .676 | | | 37 | .942 | | |
| 11 | .765 | | | 38 | .764 | .569 | |
| 12 | .854 | | | 39 | .854 | | |
| 13 | .943 | | | 40 | .942 | | |
| 14 | .981 | | | 41 | .852 | .738 | |
| 15 | .149 | .077 | | 42 | .942 | | |
| 16 | .233 | | | 43 | | 0 | Upper Base |
| 17 | .321 | | | 44 | | .138 | Lower Base |
| 18 | .409 | | | 45 | .981 | -.007 | Upper Wing |
| 19 | .498 | | | 46 | .981 | .289 | |
| 20 | .586 | | | 47 | .939 | | |
| 25 | .233 | .191 | | 48 | .851 | | |
| 26 | .321 | .221 | | 49 | .981 | .400 | |
| 27 | .409 | .231 | | 50 | .939 | | |

x = Distance from orbiter nose

y = Distance from orbiter centerline

L = Orbiter length 27.153 cm (10.690 in.)

b/2 = Orbiter wing semi-span 8.255 cm (3.250 in.)

TABLE III
BOOSTER PRESSURE TAP LOCATIONS

| Tap No. | TAP LOCATION | | | Tap No. | TAP LOCATION | | |
|---------|--------------|-------------|---------------------------------------|---------|--------------|-------------|----------------------------|
| | $(x/L)_B$ | $(y/b/2)_B$ | Surface | | $(x/L)_B$ | $(y/b/2)_B$ | Surface |
| 1 | .004 | 0 | Body $\mathfrak{L}, \theta = 0^\circ$ | 30 | .243 | .092 | Body, $\theta = 24^\circ$ |
| 2 | .014 | | | 31 | .305 | | |
| 3 | .025 | | | 32 | .367 | | |
| 4 | .062 | | | 33 | .490 | | |
| 5 | .120 | | | 34 | .613 | | |
| 6 | .181 | | | 35 | .737 | | |
| 7 | .243 | | | 36 | .798 | | |
| 8 | .305 | | | 37 | .860 | | |
| 9 | .366 | | | 38 | .921 | | |
| 10 | .490 | | | 39 | .983 | | |
| 11 | .613 | | | 40 | .062 | .155 | Body, $\theta = 45^\circ$ |
| 12 | .737 | | | 41 | .124 | | |
| 13 | .799 | | | 42 | .185 | | |
| 14 | .859 | | | 43 | .247 | | |
| 15 | .921 | | | 44 | .309 | | |
| 16 | .983 | | | 45 | .371 | | |
| 17 | .062 | .018 | Nose Section | 46 | .494 | | |
| 18 | .120 | .037 | | 47 | .618 | | |
| 19 | .181 | .046 | | 48 | .741 | | |
| 20 | .243 | | | 49 | .988 | .220 | Body, $\theta = 90^\circ$ |
| 21 | .309 | .220 | Body, $\theta = 90^\circ$ | 93 | .998 | 0 | Base, $\theta = 0^\circ$ |
| 22 | .371 | | | 94 | | .193 | 90° |
| 23 | .494 | | | 95 | | -.193 | 270° |
| 24 | .618 | | | 96 | | 0 | 180° |
| 25 | .741 | | | 97 | .803 | | Body, $\theta = 180^\circ$ |
| 26 | .803 | | | 98 | .865 | | |
| 27 | .851 | | | 99 | .927 | | |
| 28 | .896 | | | 100 | .988 | | |
| 29 | .942 | | | | | | |

x = Distance from booster nose

y = Distance from booster centerline

L = Booster length 41.107 cm (16.184 in.)

b/2 = Booster semi-span 13.805 cm (5.435 in.)

TABLE III (Continued)
BOOSTER PRESSURE TAP LOCATIONS

| Tap No. | TAP LOCATION | | | Tap No. | TAP LOCATION | | |
|---------|--------------|-------------|------------|---------|--------------|-------------|--------------|
| | $(x/c)_B$ | $(y/b/2)_B$ | Surface | | $(x/c)_B$ | $(y/b/2)_B$ | Surface |
| 53 | .098 | .221 | Upper Wing | 71 | .718 | .635 | Upper Wing |
| 54 | .320 | | | 72 | .926 | | |
| 55 | .542 | | | 73 | .066 | .773 | |
| 56 | .763 | | | 74 | .275 | | |
| 57 | .985 | | | 75 | .484 | | |
| 58 | .101 | .359 | | 76 | .696 | | |
| 59 | .320 | | | 77 | .896 | | |
| 60 | .542 | | | 83 | .195 | .565 | Upper Canard |
| 61 | .762 | | | 84 | .716 | | |
| 62 | .970 | | | 85 | .195 | .879 | |
| 63 | .103 | .497 | | 86 | .716 | | |
| 64 | .319 | | | 87 | .514 | .230 | Lower Wing |
| 65 | .528 | | | 88 | .737 | | |
| 66 | .741 | | | 89 | .960 | | |
| 67 | .948 | | | 90 | .496 | .368 | |
| 68 | .081 | .635 | | 91 | .718 | | |
| 69 | .292 | | | 92 | .940 | | |
| 70 | .507 | | | | | | |

x = Distance from airfoil leading edge

y = Distance from booster centerline

c = Local airfoil chord

b/2 = Booster wing semi-span 13.805 cm (5.435 in.) for wing taps

b/2 = Booster canard semi-span 6.071 cm (2.390 in.) for canard taps

TABLE III (Concluded)
BOOSTER PRESSURE TAP LOCATIONS

| Surface | $(y/b/2)_B$ | Local Chord, cm | Local Chord, in. |
|---------|-------------|-----------------|------------------|
| Wing | .221 | 8.387 | 3.302 |
| | .359 | 7.640 | 3.008 |
| | .497 | 6.962 | 2.741 |
| | .635 | 6.116 | 2.408 |
| | .773 | 5.301 | 2.087 |
| | .230 | 8.336 | 3.282 |
| | .368 | 7.564 | 2.978 |
| | .565 | 4.877 | 1.923 |
| | .879 | 4.877 | 1.923 |
| | | | |
| Canard | | | |

TABLE IV. DIMENSIONAL DATA

MODEL COMPONENT: BODY - MDAC Orbiter

GENERAL DESCRIPTION: Basic fuselage contours including canopy with modified aft fuselage cross sections; cross-sectional shape constant from station 1500 to end of fuselage - model scale 1/180.

DRAWING NUMBER: 255 BJ 00060, Rev. B

| <u>DIMENSIONS:</u> | <u>FULL-SCALE</u> | <u>MODEL SCALE</u> |
|----------------------|-------------------|--------------------|
| Length | <u>156.4</u> | <u>.869</u> |
| Max. Width | <u>27.1</u> | <u>.150</u> |
| Max. Depth | <u>30.3</u> | <u>.168</u> |
| Fineness Ratio | <u> </u> | <u> </u> |
| Area | <u> </u> | <u> </u> |
| Max. Cross-Sectional | <u> </u> | <u> </u> |
| Planform | <u> </u> | <u> </u> |
| Wetted | <u> </u> | <u> </u> |
| Base | <u> </u> | <u> </u> |

TABLE IV. (CONTINUED)

MODEL COMPONENT: Wing - MDAC OrbiterGENERAL DESCRIPTION: Model Scale 1/180DRAWING NUMBER: 255 BJ 00050, Rev. B

| <u>DIMENSIONS:</u> | <u>FULL-SCALE</u> | <u>MODEL SCALE</u> |
|------------------------------|-------------------|--------------------|
| <u>TOTAL DATA</u> | | |
| Area, ft ² | | |
| Planform | <u>5330.0</u> | <u>.164</u> |
| Wetted | | |
| Span (equivalent), ft | <u>97.5</u> | <u>.542</u> |
| Aspect Ratio | <u>1.79</u> | <u>1.79</u> |
| Rate of Taper | | |
| Taper Ratio | <u>.230</u> | <u>.230</u> |
| Diehedral Angle, degrees | <u>10.0</u> | <u>10.0</u> |
| Incidence Angle, degrees | <u>2.0</u> | <u>2.0</u> |
| Aerodynamic Twist, degrees | <u>0</u> | <u>0</u> |
| Sweep Back Angles, degrees | | |
| Leading Edge | <u>55.0</u> | <u>55.0</u> |
| Trailing Edge | <u>0</u> | <u>0</u> |
| 0.25 Element Line | <u>47.0</u> | <u>47.0</u> |
| Chords: | | |
| Root (Wing Sta. 0.0), inches | <u>1084.8</u> | <u>6.027</u> |
| Tip, (equivalent), inches | <u>219.6</u> | <u>1.387</u> |
| MAC, inches | <u>754.3</u> | <u>4.193</u> |
| Fus. Sta. of .25 MAC | | |
| W.P. of .25 MAC | | |
| Airfoil Section | | |
| Root (B.L. 162) | <u>0010-64</u> | <u>0010-64</u> |
| Tip (B.L. 540) | <u>0009-64</u> | <u>0009-64</u> |
| <u>EXPOSED DATA</u> | | |
| Area, ft ² | | |
| Span, (equivalent), ft | <u>3147.3</u> | <u>.097</u> |
| Aspect Ratio | <u>70.5</u> | <u>.392</u> |
| Taper Ratio | <u>1.58</u> | <u>1.5</u> |
| Chords | | |
| Root, inches | <u>855.0</u> | <u>4.750</u> |
| Tip, inches | <u>219.6</u> | <u>1.387</u> |
| MAC | <u>607.2</u> | <u>3.373</u> |
| Fus. Sta. of .25 MAC | | |
| W.P. of .25 MAC | | |

TABLE IV. (CONTINUED)

MODEL COMPONENT: Vertical Tail - MDAC OrbiterGENERAL DESCRIPTION: Model Scale 1/180DRAWING NUMBER: 255 BJ 00050, Rev. BDIMENSIONS: FULL-SCALE MODEL SCALETOTAL DATA

| | | |
|----------------------------|----------------|----------------|
| Area, ft ² | | |
| Planform | <u>580.0</u> | <u>.013</u> |
| Wetted | | |
| Span (equivalent), ft. | <u>27.5</u> | <u>.153</u> |
| Aspect Ratio | | |
| Rate of Taper | | |
| Taper Ratio | <u>.638</u> | <u>.638</u> |
| Diehedral Angle, degrees | | |
| Incidence Angle, degrees | | |
| Aerodynamic Twist, degrees | | |
| Toe-In Angle | | |
| Cant Angle | | |
| Sweep Back Angles, degrees | | |
| Leading Edge | <u>30.0</u> | <u>30.0</u> |
| Trailing Edge | <u>13.1</u> | <u>13.1</u> |
| 0.25 Element Line | <u>26.2</u> | <u>26.2</u> |
| Chords: | | |
| Root, inches | <u>309.6</u> | <u>1.720</u> |
| Tip, (equivalent), inches | <u>196.3</u> | <u>1.093</u> |
| MAC, inches | <u>21.4</u> | <u>.119</u> |
| Fus. Sta. of .25 MAC | | |
| W.P. of .25 MAC | | |
| Airfoil Section | | |
| Root | <u>0009-64</u> | <u>0009-64</u> |
| Tip | <u>0009-64</u> | <u>0009-64</u> |

EXPOSED DATA

| | | |
|------------------------|--------------|--------------|
| Area, ft ² | <u>580.0</u> | <u>.018</u> |
| Span, (equivalent), ft | <u>27.5</u> | <u>.153</u> |
| Aspect Ratio | | |
| Taper Ratio | <u>.638</u> | <u>.638</u> |
| Chords: | | |
| Root, inches | <u>309.6</u> | <u>1.720</u> |
| Tip, inches | <u>196.3</u> | <u>1.093</u> |
| MAC, inches | <u>21.4</u> | <u>.119</u> |
| Fus. Sta. of .25 MAC | | |
| W.P. of .25 MAC | | |

TABLE IV. (CONTINUED)

MODEL COMPONENT: BODY - MDAC BoosterGENERAL DESCRIPTION: Configuration 19A fuselage without base flare and boattail
Model Scale 1/180DRAWING NUMBER: 256-19-0001, Rev. ADIMENSIONS:

| | <u>FULL-SCALE</u> | <u>MODEL SCALE</u> |
|----------------------|-------------------|--------------------|
| Length (Ft) | <u>241.7</u> | <u>1.343</u> |
| Max. Width (Ft) | <u>34.0</u> | <u>.189</u> |
| Max. Depth (Ft) | <u>34.0</u> | <u>.189</u> |
| Fineness Ratio | _____ | _____ |
| Area | _____ | _____ |
| Max. Cross-Sectional | _____ | _____ |
| Planform | _____ | _____ |
| Wetted | _____ | _____ |
| Base | _____ | _____ |

TABLE IV. (CONTINUED)

MODEL COMPONENT: Wing - MDAC BoosterGENERAL DESCRIPTION: Configuration 19A WingModel Scale 1/180

DRAWING NUMBER:

DIMENSIONS:

FULL-SCALEMODEL SCALETOTAL DATA

| | | |
|----------------------------|--------|------|
| Area, ft ² | | |
| Planform | 6020.0 | .186 |
| Wetted | | |
| Span (equivalent), ft. | 116.0 | .811 |
| Aspect Ratio | 3.54 | 3.54 |
| Rate of Taper | | |
| Taper Ratio | .135 | .435 |
| Dihedral Angle, degrees | 7.67 | 7.67 |
| Incidence Angle, degrees | 3.0 | 3.0 |
| Aerodynamic Twist, degrees | 0 | 0 |

Sweep Back Angles, degrees

| | | |
|-------------------|------|------|
| Leading Edge | 44.0 | 44.0 |
| Trailing Edge | | |
| 0.25 Element Line | | |

Chords:

| | | |
|------------------------------|-------|--------|
| Root (Wing Sta. 0.0), inches | 690.0 | 3.333 |
| Tip, (equivalent) | 300.0 | 1.667 |
| MAC, inches | 520.0 | 2.839 |
| Fus. Sta. of .25 MAC, inches | 3625 | 20.139 |
| W.P. of .25 MAC, inches | | |
| B.L. of .25 MAC, inches | 380 | 2.111 |

Airfoil Section

| | | |
|------|---------|---------|
| Root | 0010-64 | 0010-64 |
| Tip | 0010-64 | 0010-64 |

EXPOSED DATA

| | | |
|-------------------------|--------|-------|
| Area, ft ² | 4190.0 | .129 |
| Span, (equivalent), ft. | | |
| Aspect Ratio | | |
| Taper Ratio | | |
| Chords: | | |
| Root, inches | 594.0 | 3.300 |
| Tip, inches | 300.0 | 1.667 |
| MAC | | |
| Fus. Sta. of .25 MAC | | |
| W.P. of .25 MAC | | |

TABLE IV. (CONTINUED)

MODEL COMPONENT: Vertical Tails - MDAC Booster

GENERAL DESCRIPTION: Configuration 17 Vertical Tails

Model Scale 1/180

DRAWING NUMBER: 256-17-0001, Rev. A

DIMENSIONS: FULL-SCALE MODEL SCALE

TOTAL DATA (Values for one)

| | | |
|----------------------------|--------------|--------------|
| Area | | |
| Planform (True) | 438 | .014 |
| (Side Projection) | 397 | .012 |
| Span (equivalent), inches | 276 | 1.533 |
| Aspect Ratio | 1.21 | 1.21 |
| Rate of Taper | | |
| Taper Ratio | .520 | .520 |
| | | |
| Toe-In Angle | 0 | 0 |
| Cant Angle | 25 | 25 |
| Sweep Back Angles, degrees | | |
| Leading Edge | 40 | 40 |
| Trailing Edge | | |
| 0.25 Element Line | | |
| Chords: | | |
| Root | 300 | 1.667 |
| Tip, (equivalent), inches | 156 | .867 |
| MAC, inches | 236 | 1.311 |
| Fus. Sta. of .25 MAC | | |
| W.P. of .25 MAC | | |
| Airfoil Section | | |
| Root | NACA 61A-009 | NACA 61A-009 |
| Tip | NACA 61A-009 | NACA 61A-009 |

EXPOSED DATA

| | | |
|----------------------|--|--|
| Area | | |
| Span, (equivalent) | | |
| Aspect Ratio | | |
| Taper Ratio | | |
| Chords | | |
| Root | | |
| Tip | | |
| MAC | | |
| Fus. Sta. of .25 MAC | | |
| W.P. of .25 MAC | | |

TABLE IV. (CONTINUED)

MODEL COMPONENT: Canard - MDAC BoosterGENERAL DESCRIPTION: Configuration 19A CanardModel Scale 1/160DRAWING NUMBER: 256-19-001, Rev. ADIMENSIONS:

| | <u>FULL-SCALE</u> | <u>MODEL SCALE</u> |
|------------------------------|-------------------|--------------------|
| Theo. Area, Ft ² | 1660 | .051 |
| Exp Area, Ft ² | 1215 | .038 |
| Aspect Ratio | 3.0 | 3.0 |
| Chord (Incl. Flap), Ft | 23.625 | .131 |
| Airfoil (360 In. Theo Chord) | NACA 63-018 | NACA 63-018 |

TABLE V. INDEX OF MODEL FIGURES

| Figure | Title | Page |
|--------|---|------|
| 1 | Pressure Tap Layout - Orbiter | 28 |
| 2 | Pressure Tap Layout - Booster | 29 |
| 3 | Modifications to Orbiter Model | 30 |
| 4 | Modifications to Booster Model | 31 |
| 5 | General Arrangement of Models in Tunnel | 32 |
| 6 | Separation Nomenclature and Center of Gravity Locations | 33 |
| 7 | Photograph of MDAC Booster and Orbiter Models | 34 |
| 8 | Photograph of Side View of Models and Separation Hardware | 35 |
| 9 | Photograph of Top View of Models and Associated Separation Hardware | 36 |
| 10 | Photograph of Booster and Orbiter Sting-Nozzle Hardware | 37 |
| 11 | Photograph of Booster Nozzle Hardware | 38 |
| 12 | Photograph of Orbiter Nozzle Hardware | 39 |

TABLE VI. INDEX OF DATA FIGURES

VOLUME 4

| TITLE | VEHICLE SECTION | TYPE PLOT | CONDITIONS VARYING | PAGES |
|--|-----------------|-----------------|------------------------------------|---------|
| Longitudinal Distribution of Orbiter Fuselage Pressures-Mach 3 | Fuselage | CP vs. X/L | DELTAX, DELTAZ, Y/B, α_B | 1-90 |
| Longitudinal Distribution of Orbiter Upper wing Pressures-Mach 3 | Upper Wing | CP vs. X/L | DELTAX, DELTAZ, Y/B, α_B | 91-180 |
| Longitudinal Distribution of Orbiter Lower Wing Pressures-Mach 3 | Lower Wing | CP vs. X/L | DELTAX, DELTAZ, Y/B, α_B | 181-360 |
| Radial Distribution of Orbiter Base Pressures-Mach 3 | Base | CP vs. θ | DELTAX, DELTAZ, α_B | 361-405 |

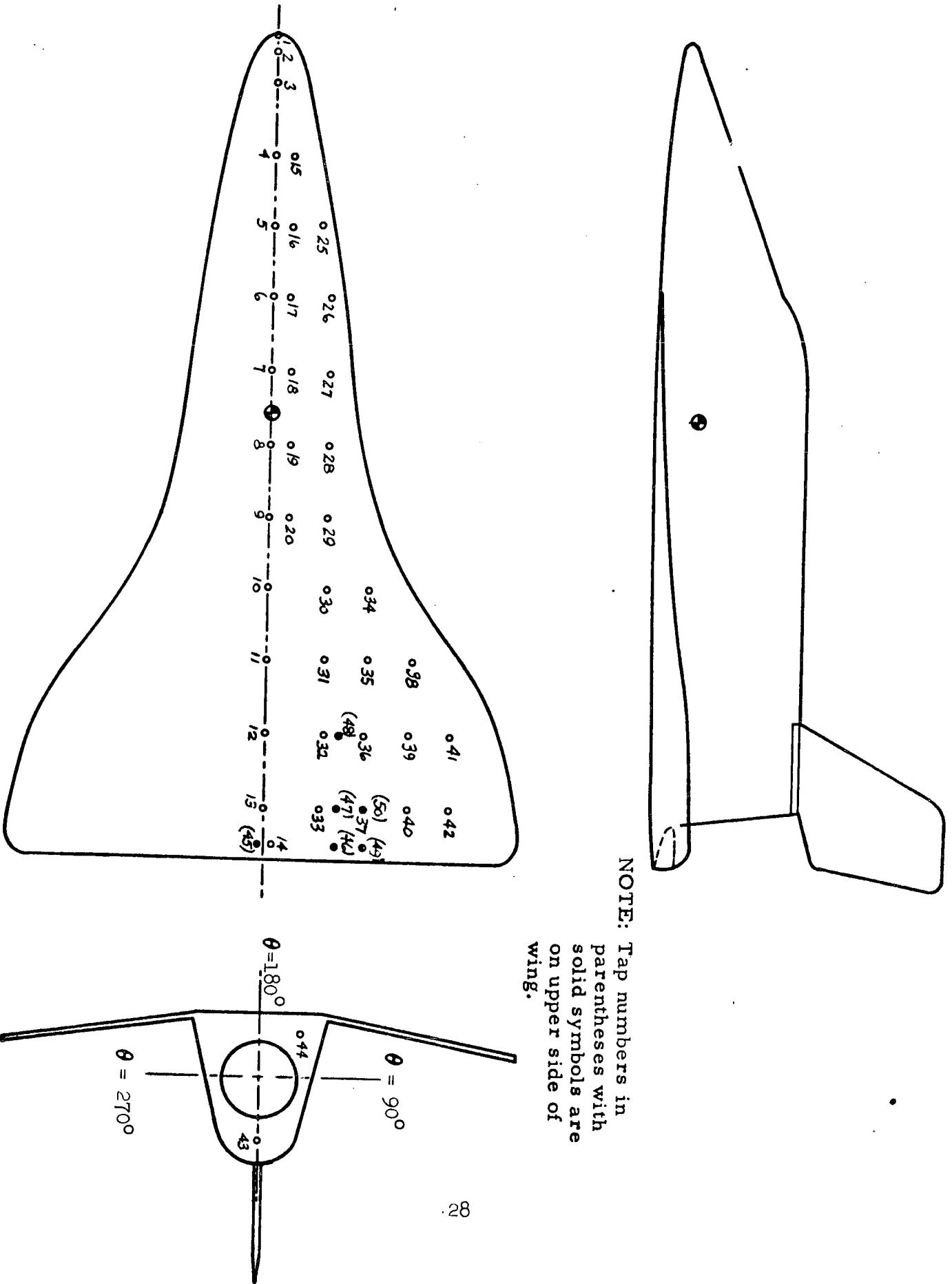


Fig. 1.- Pressure Tap Layout - Orbiter

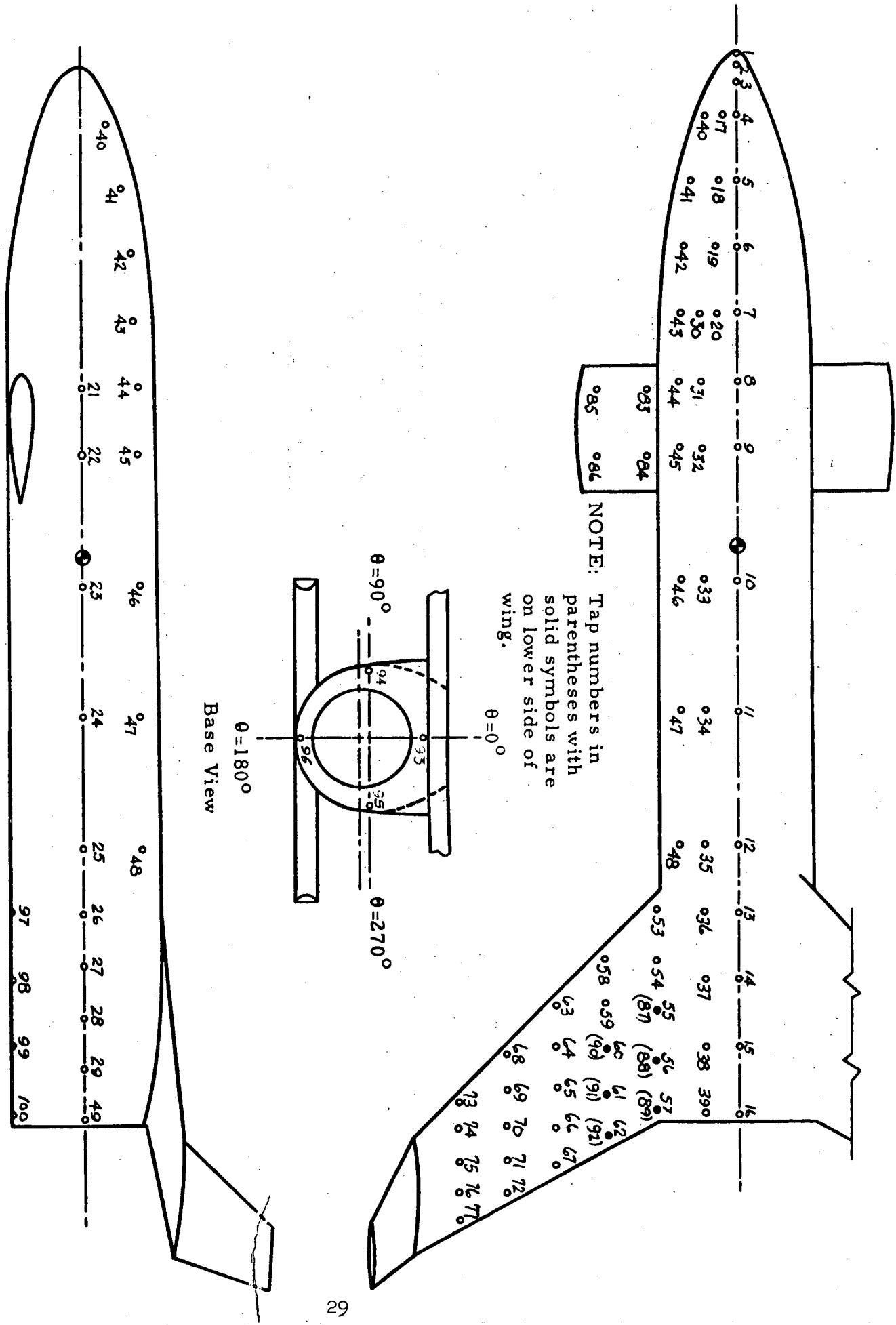


Fig. 2 – Pressure Tap Layout - Booster

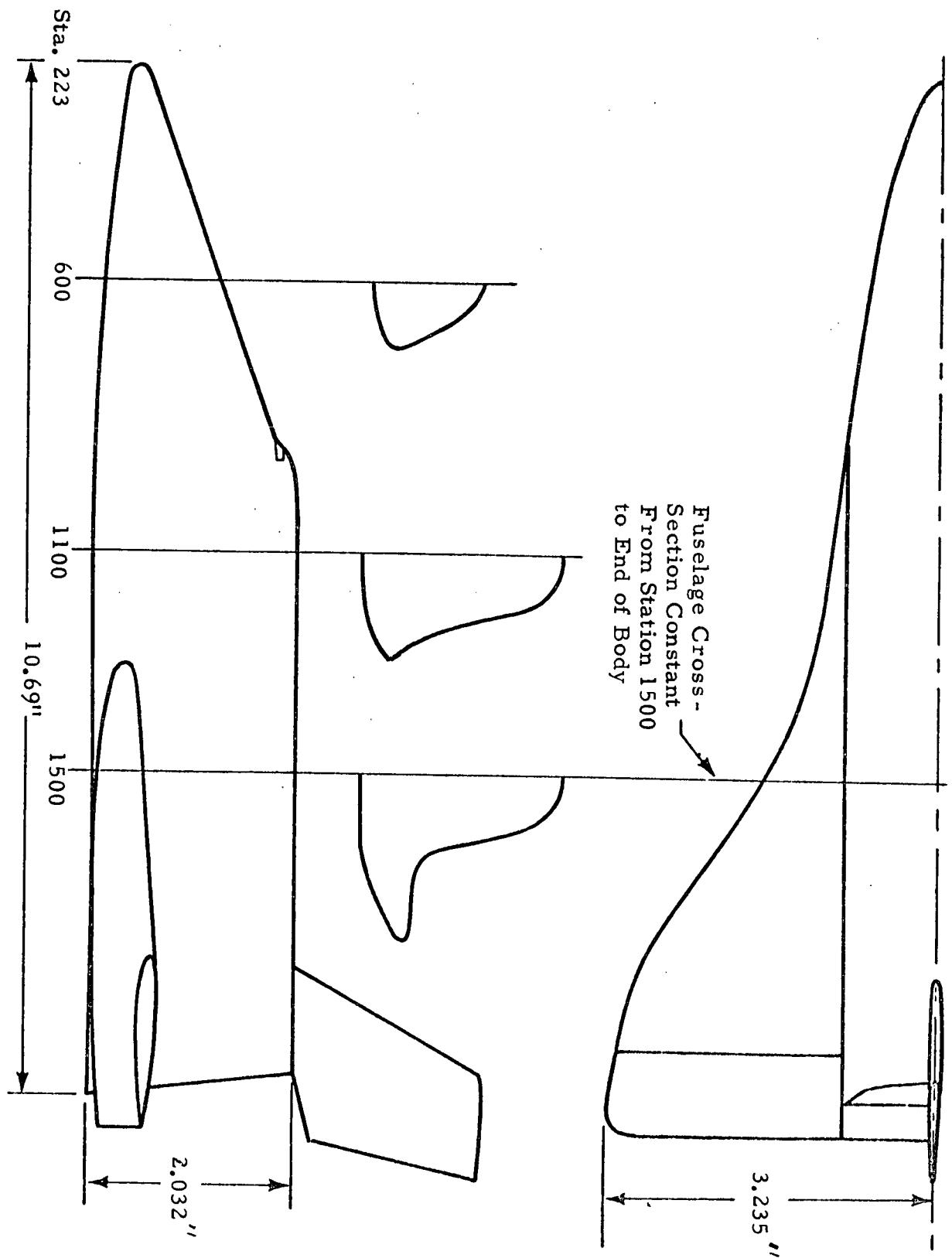


Fig. 3 - Modifications to Orbiter Model

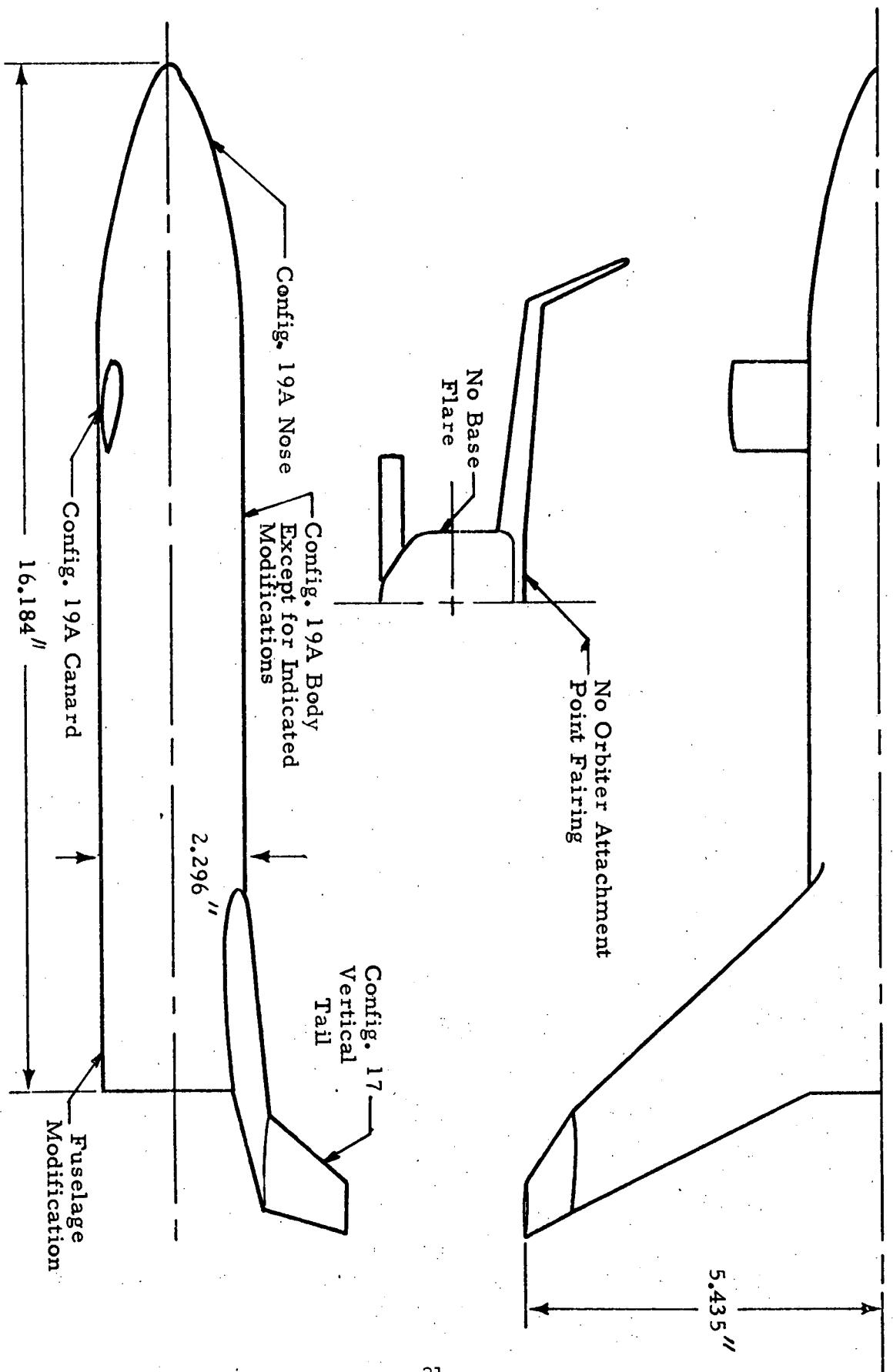


Fig. 4 - Modifications to Booster Model

40-INCH SUPERSONIC TUNNEL A

Scale - 1/5

Mark. Find. Pt. Sta. 77 22 Find C. R. Sta. 54 72 Nom. C. R. Sta. 42 72 Att C. R. Sta. 24 72 Tunnel Wall

Fwd. C.R.
Sta. 5472

Non. C.R.
Sla. 42.72

AN C.R.
Sla. 24.72

Tunnel Wall

Roll Hub
Sta. 0.00

32

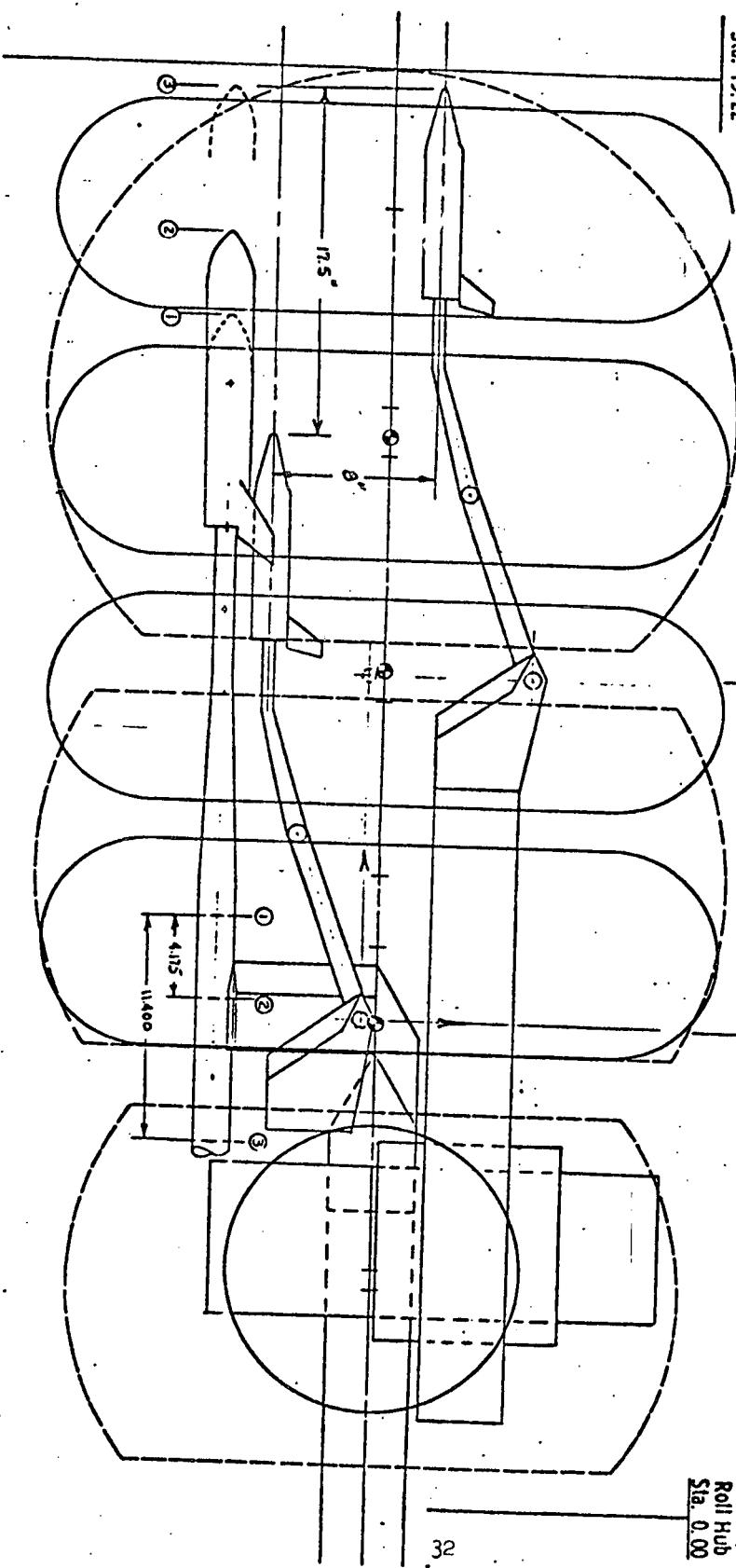


Figure 5 - General arrangement of models in tunnel

Legend:

- High Temperature Windows
- - - Low Temperature Windows

Figure 5 - General arrangement of models in tunnel

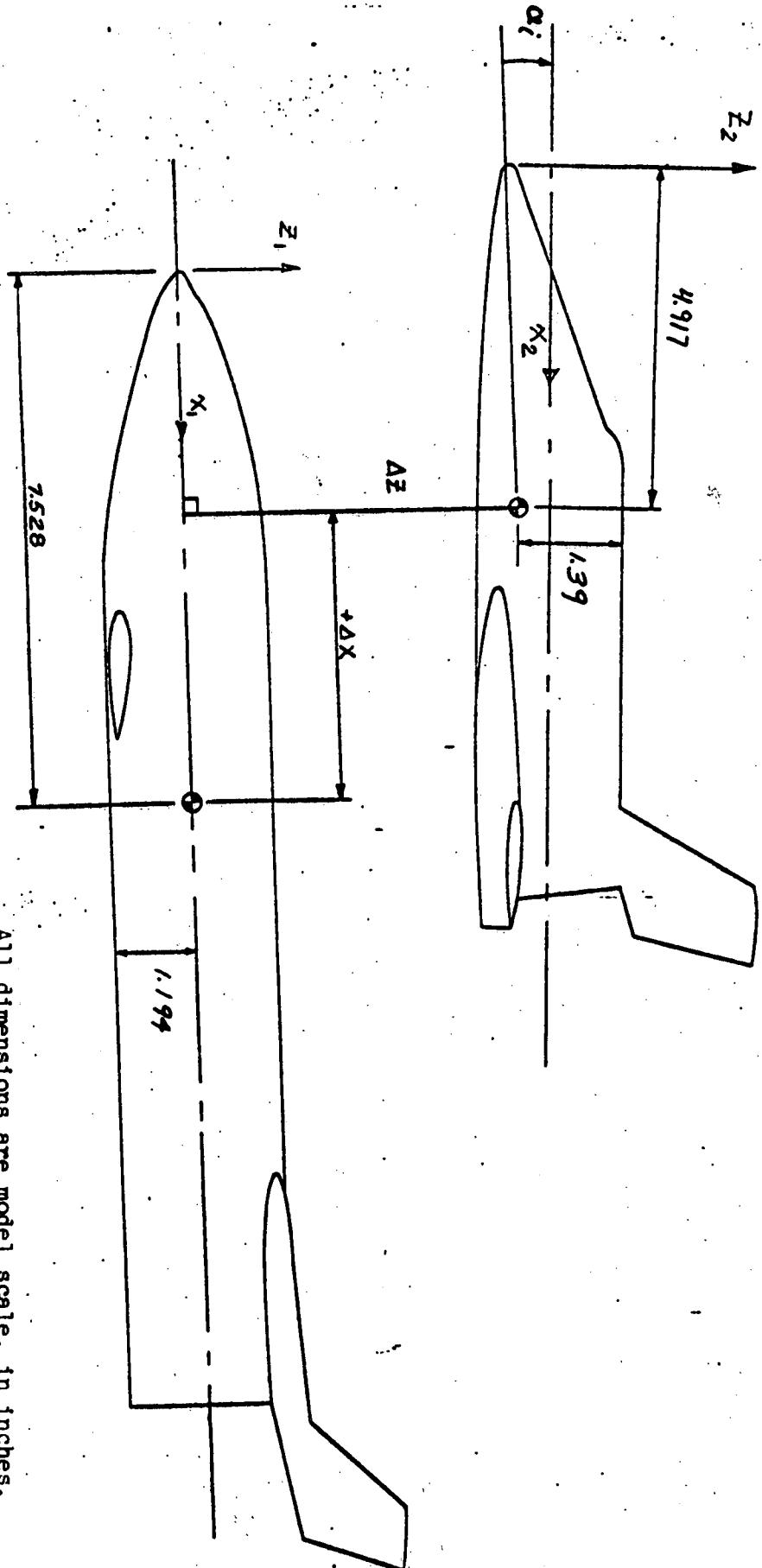


Figure 6. Separation Nomenclature and Center of Gravity Locations

1974
(3-22-71) VAI163 NASA - SPACE SHUTTLE

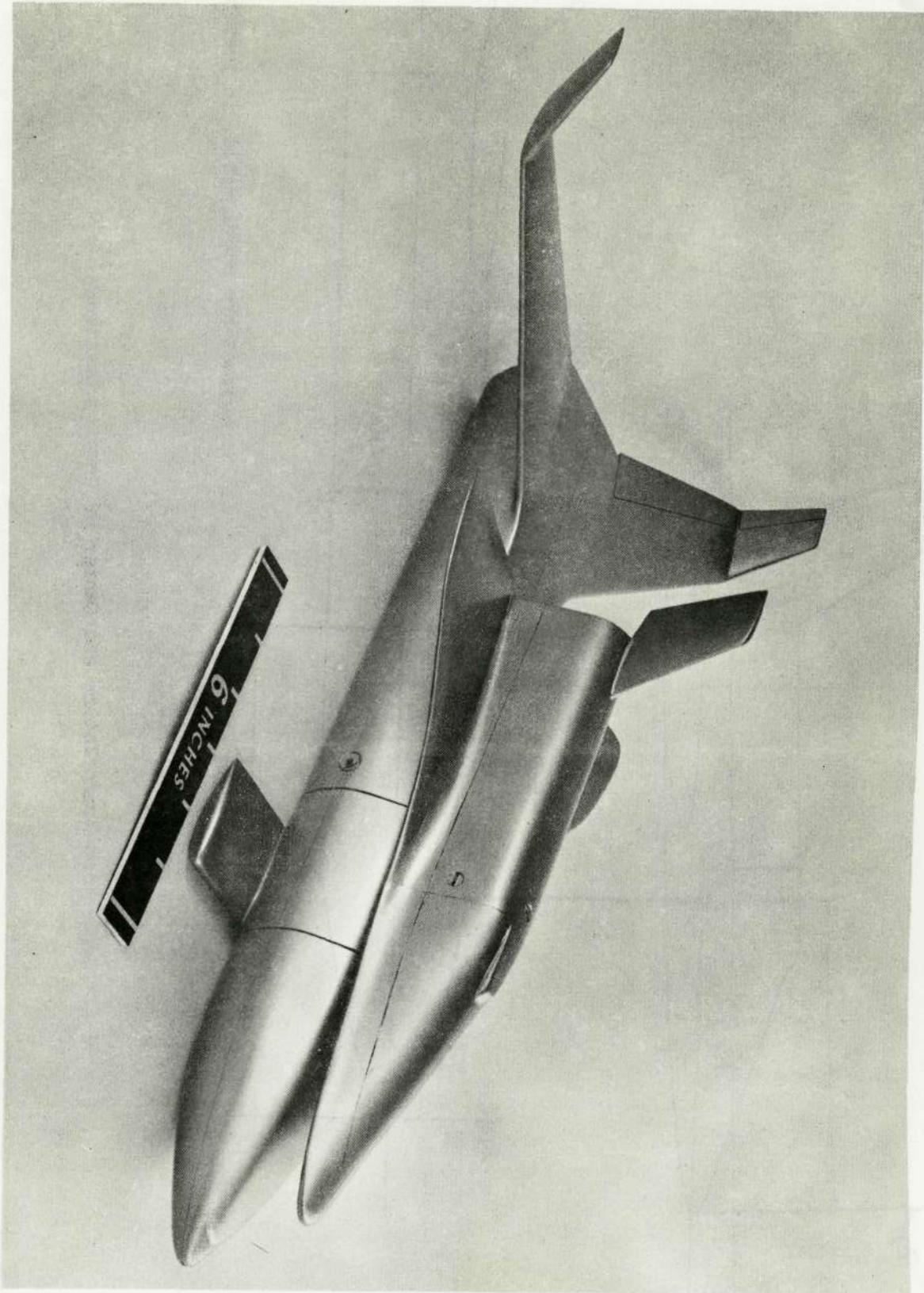
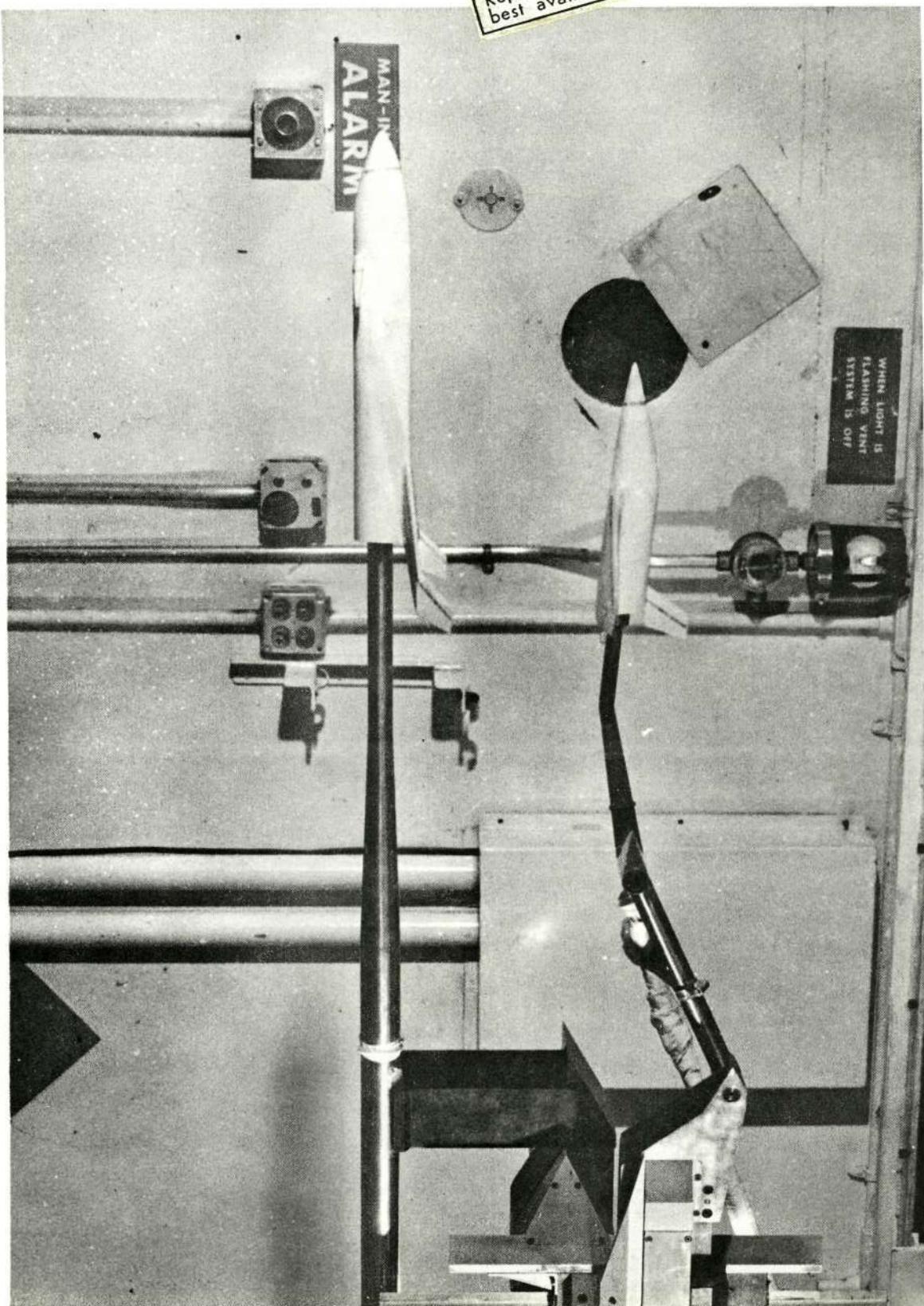


Figure 7. Photograph of MDAC Booster and Orbiter Models

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AEC INC. OPERATING CONTRACTOR
ARHOLD A.F. STATION TECN.

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prior written approval of the responsible
Air Force Office of Information.

Figure 8. Photograph of Side View of Models and Separation Hardware



U.S. AIR FORCE PHOTO-AEDC
Aero Inc., OPERATING CONTRACTOR
ARNOLD A.F.M. STATION TENN.

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prior written approval of the responsible
Air Force Office of Information.

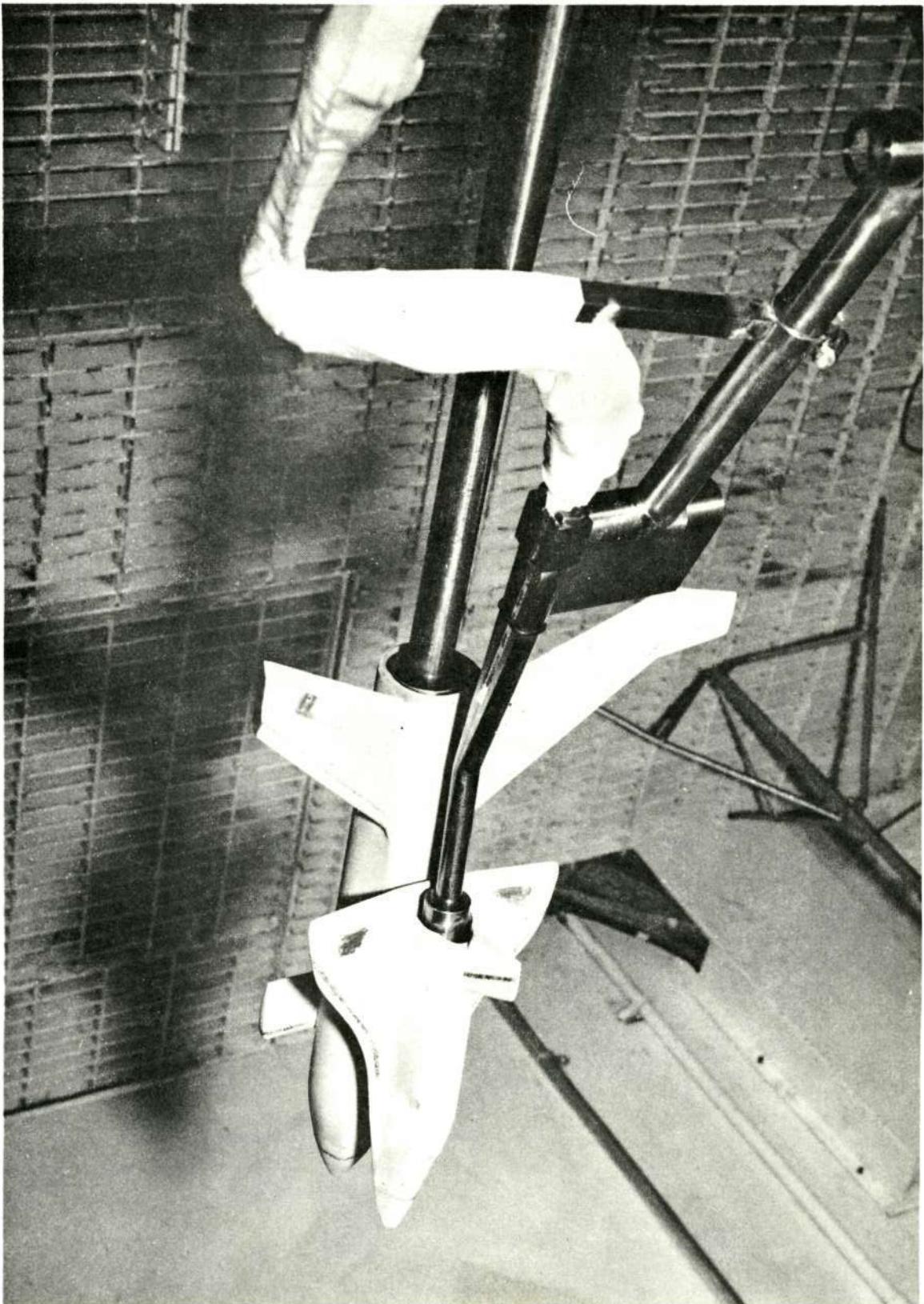
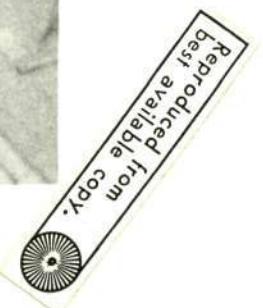


Figure 9. Photograph of Top View of Models and Associated Separation Hardware

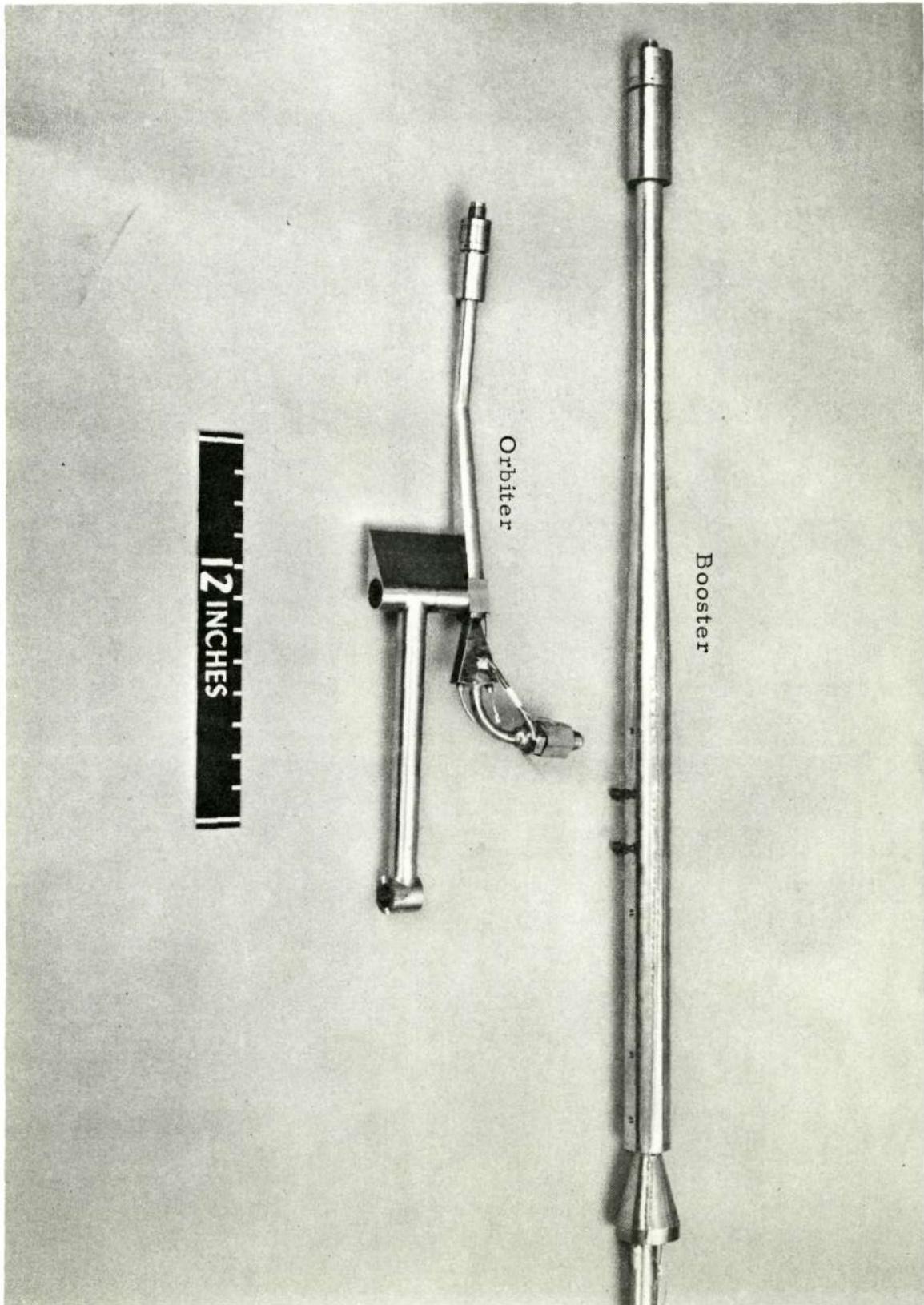
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(4-27-71) VAI163 NASA STS



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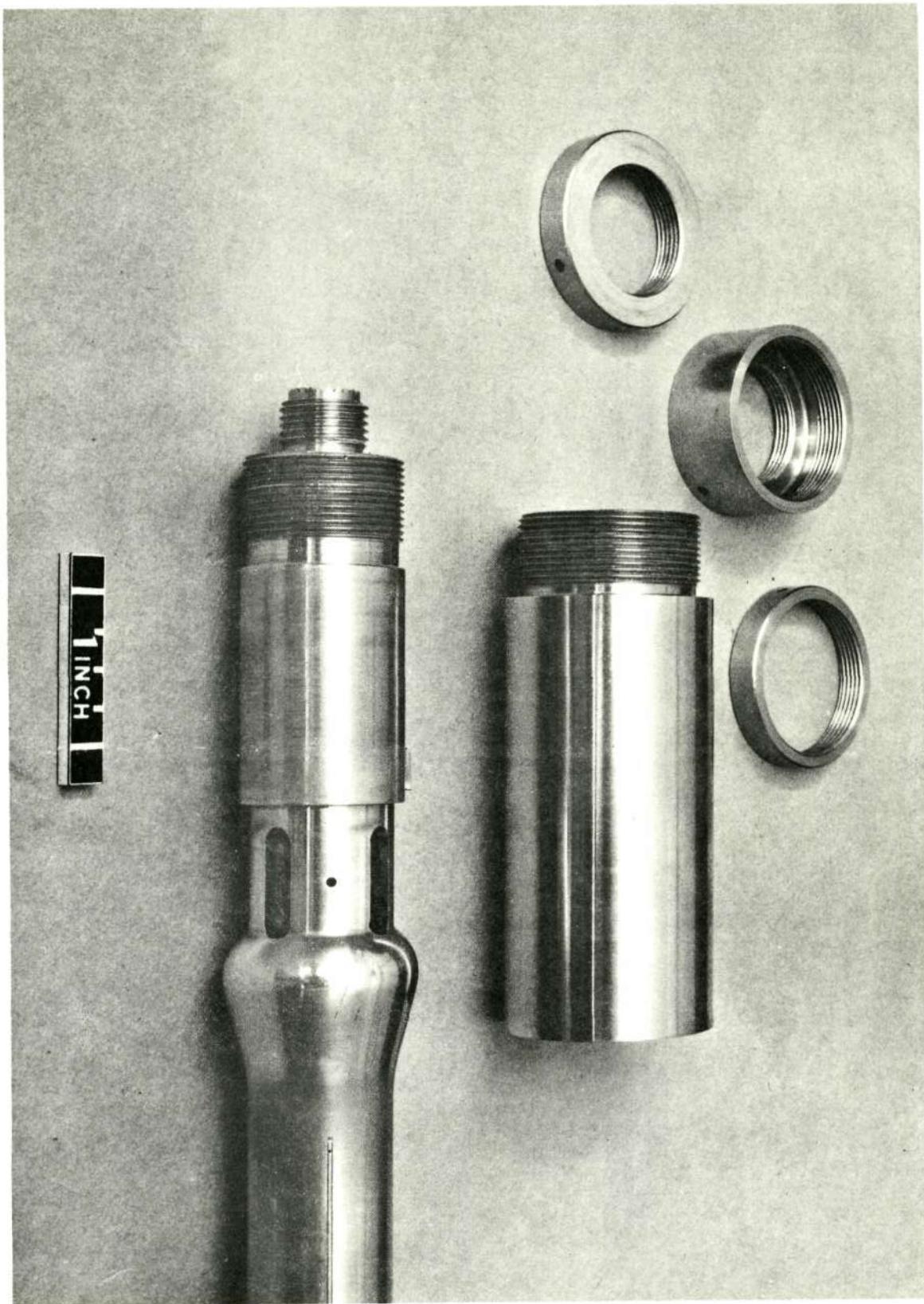


3901

(5-14-71) VAL163 SPACE SHUTTLE NOZZLES

Figure 10. Photograph of Booster and Orbiter Sting Nozzle Hardware

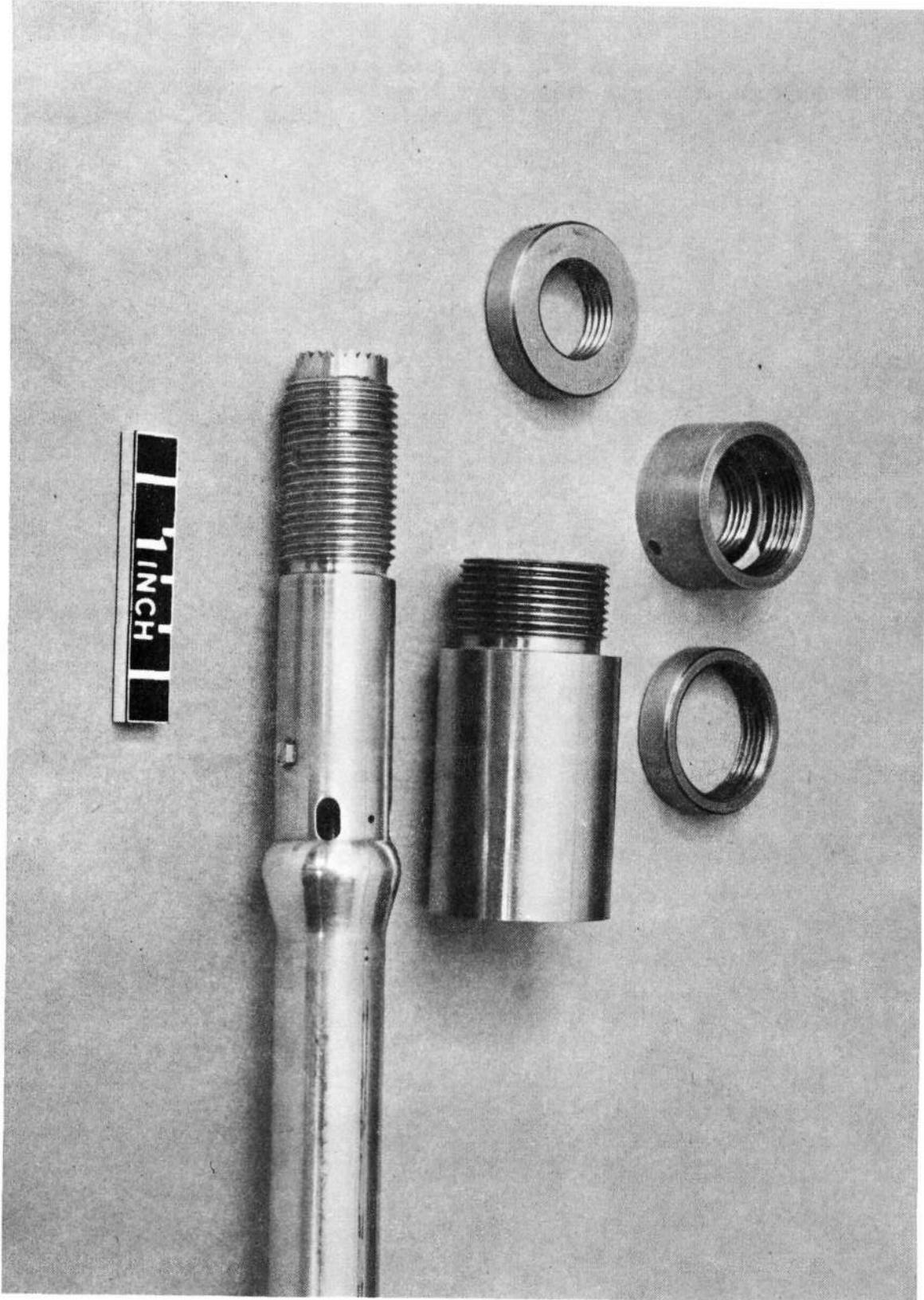
Figure 11. Photograph of Booster Nozzle Hardware



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ARO INC. OPERATING CONTRACTOR
ARMOLD A.F. STATION TENN.

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prior written approval of the responsible
Air Force Office of Information.

(S-14-71) VAL163 SPACE SHUTTLE NOZZLES Figure 12. Photograph of Orbiter Nozzle Hardware



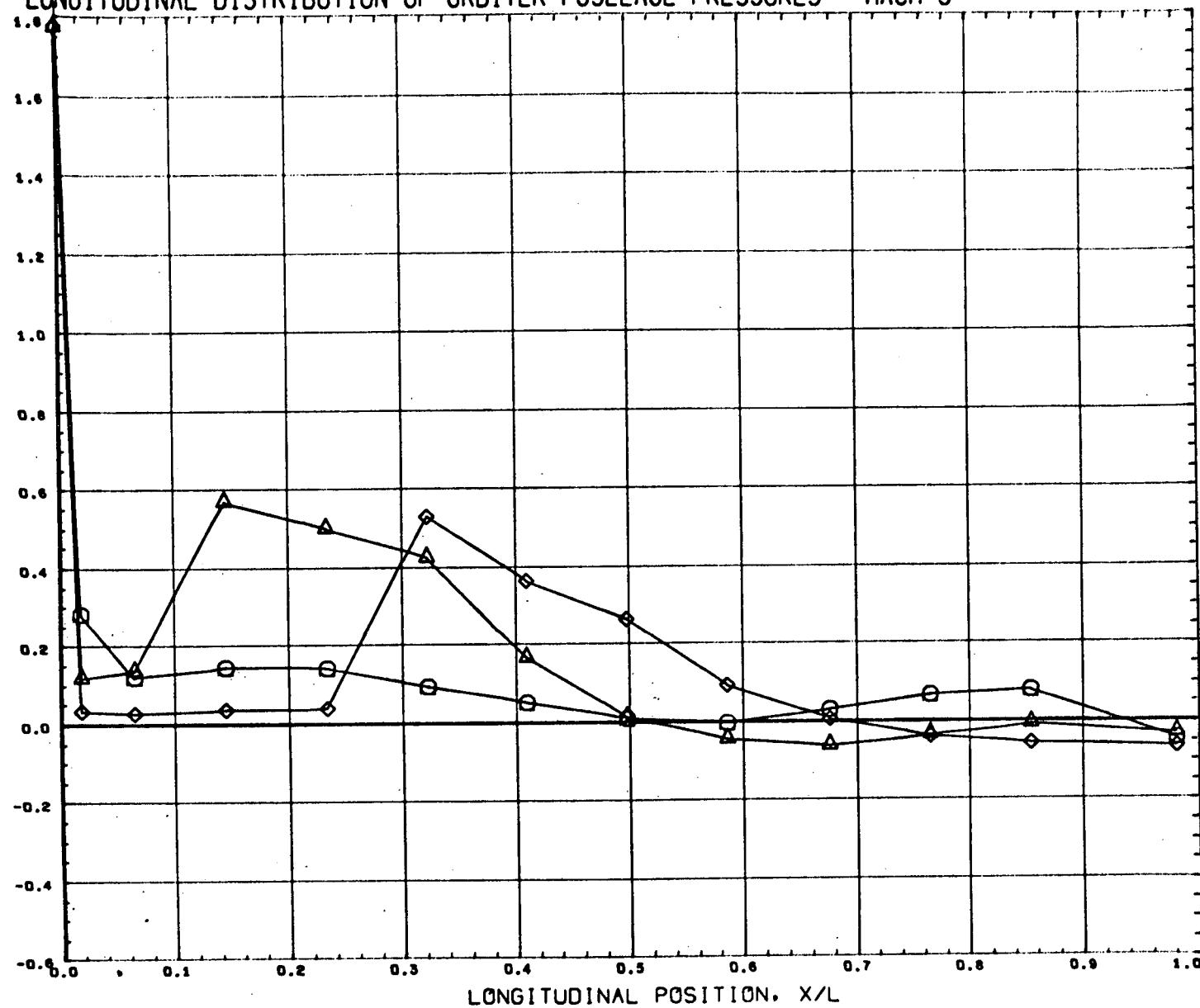
U. S. AIR FORCE PHOTO-ADC
Aerojet General Corporation
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prior written approval of the responsible
Arnold A.F. Station Tech.
Air Force Office of Information,

D A T A F I G U R E S

Tabulations of the plotted data and corresponding source data are available from SADSAC Operations.

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
 O - 0.143 0.000 0.120
 D 0.103 0.226

PARAMETRIC VALUES
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 ALPHA1 0.000 ORBPOW 100.000
 BSTPOW 50.000

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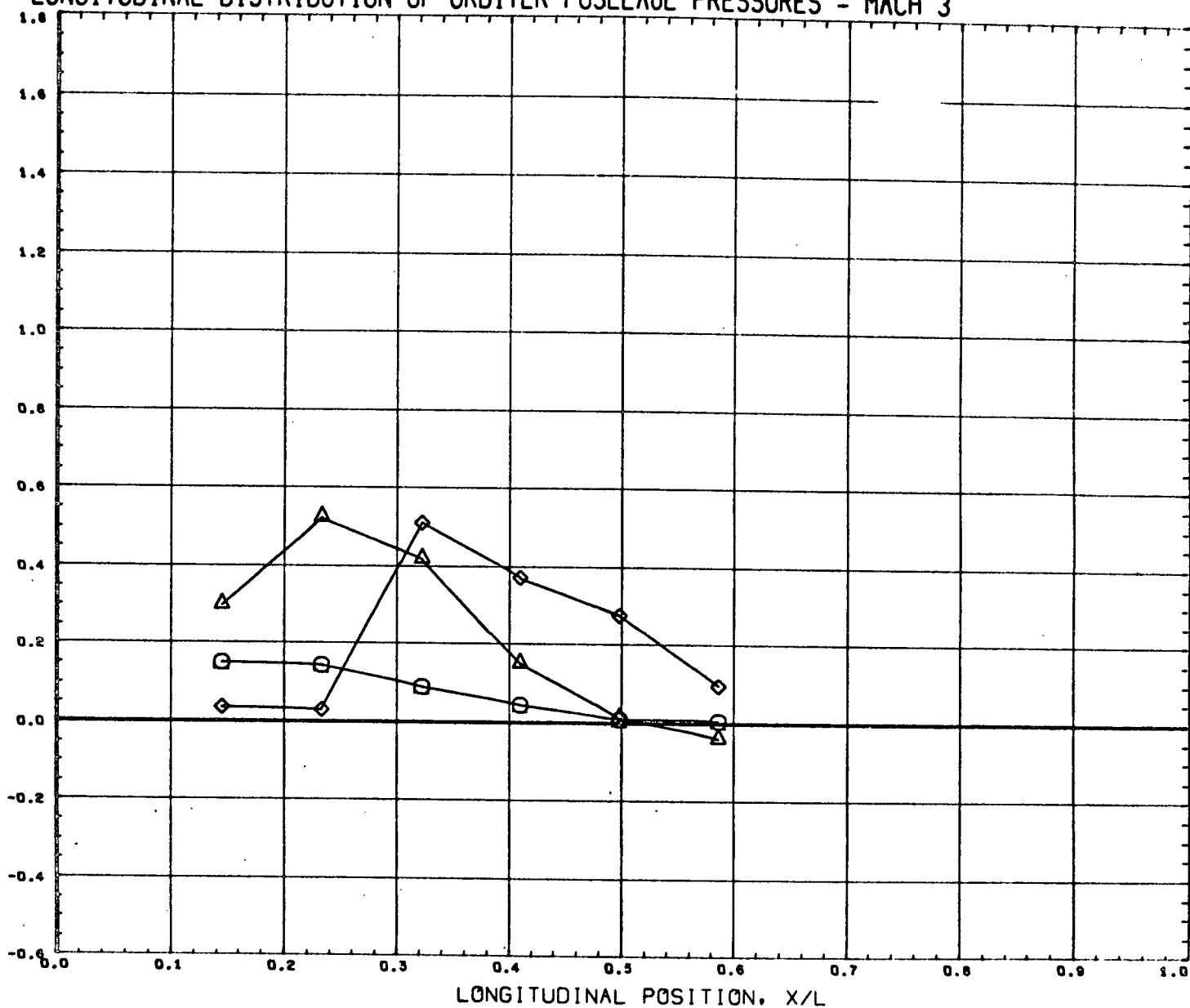
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PAGE

1

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

△ - 0.143 0.076 0.120

□ 0.103

◊ 0.228

PARAMETRIC VALUES

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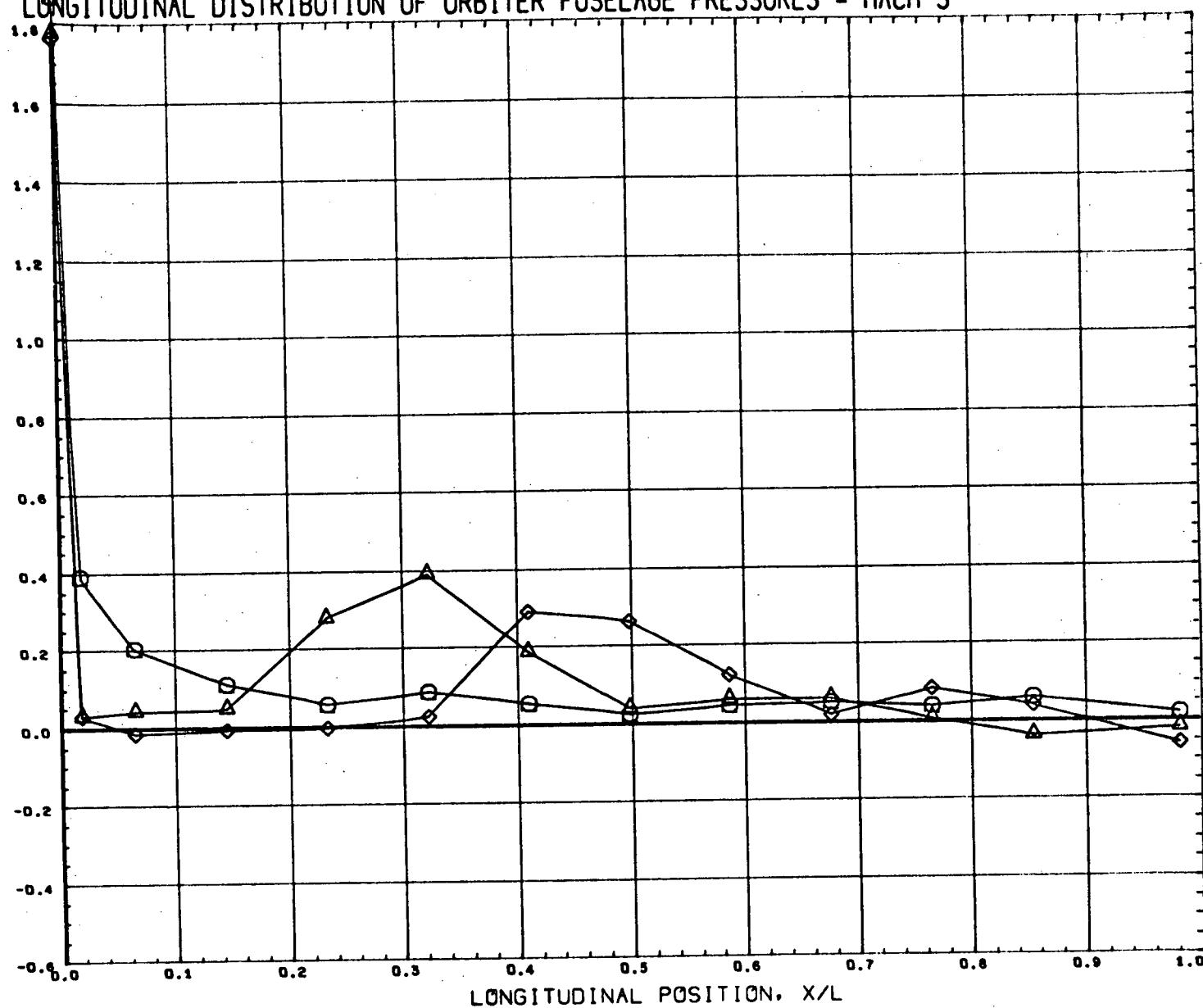
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PAGE

2

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX T/B DELTAZ

| | | | |
|---|---------|-------|-------|
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| △ | 0.104 | | |
| ◊ | 0.226 | | |

PARAMETRIC VALUES

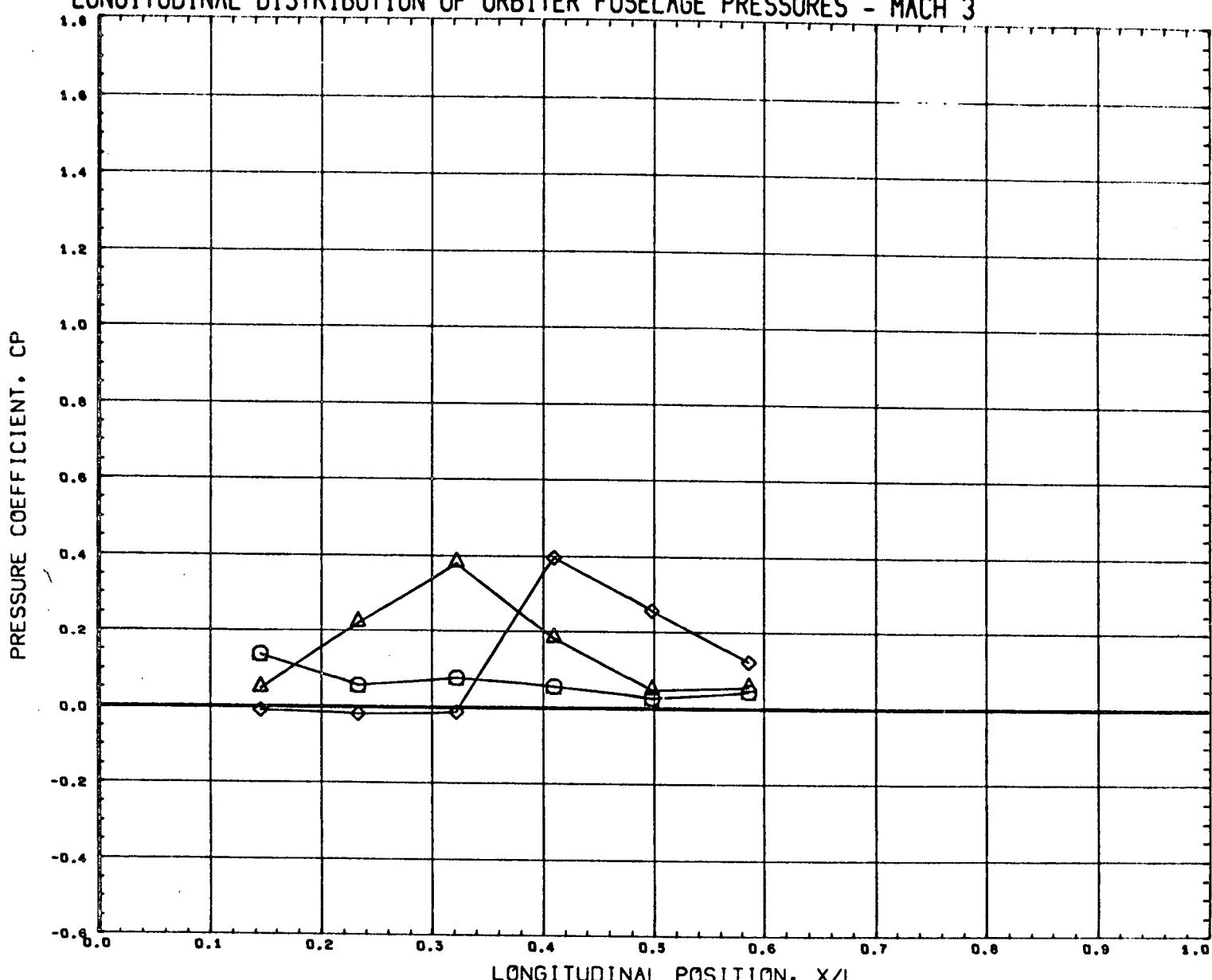
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|--------|---------|--------|---------|
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| BSTPOW | 50.000 | | |

REFERENCE FILE
AEDC VA1163 MDAC ORBITER (BODY)

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PAGE 3

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|-------------|---------|-------|-------|
| \triangle | - 0.143 | 0.076 | 0.151 |
| \square | 0.104 | | |
| \diamond | 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|---------|
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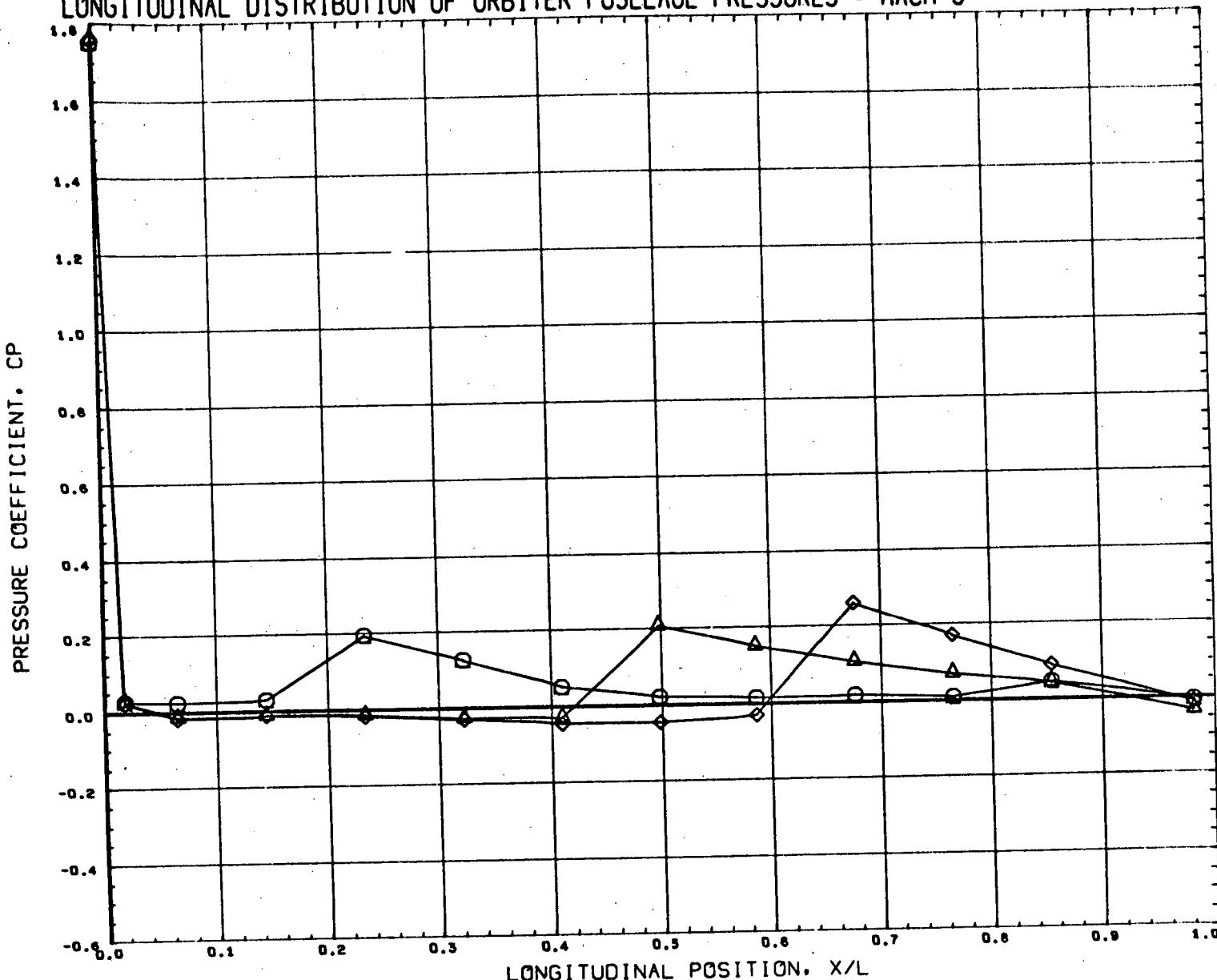
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PAGE

4

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



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 △ - 0.103 0.000 0.000
 ◇ - 0.226 0.000 0.000

PARAMETRIC VALUES
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 ALPHA1 = 0.000 ORBPOW 100.000
 BSTPOW = 50.000

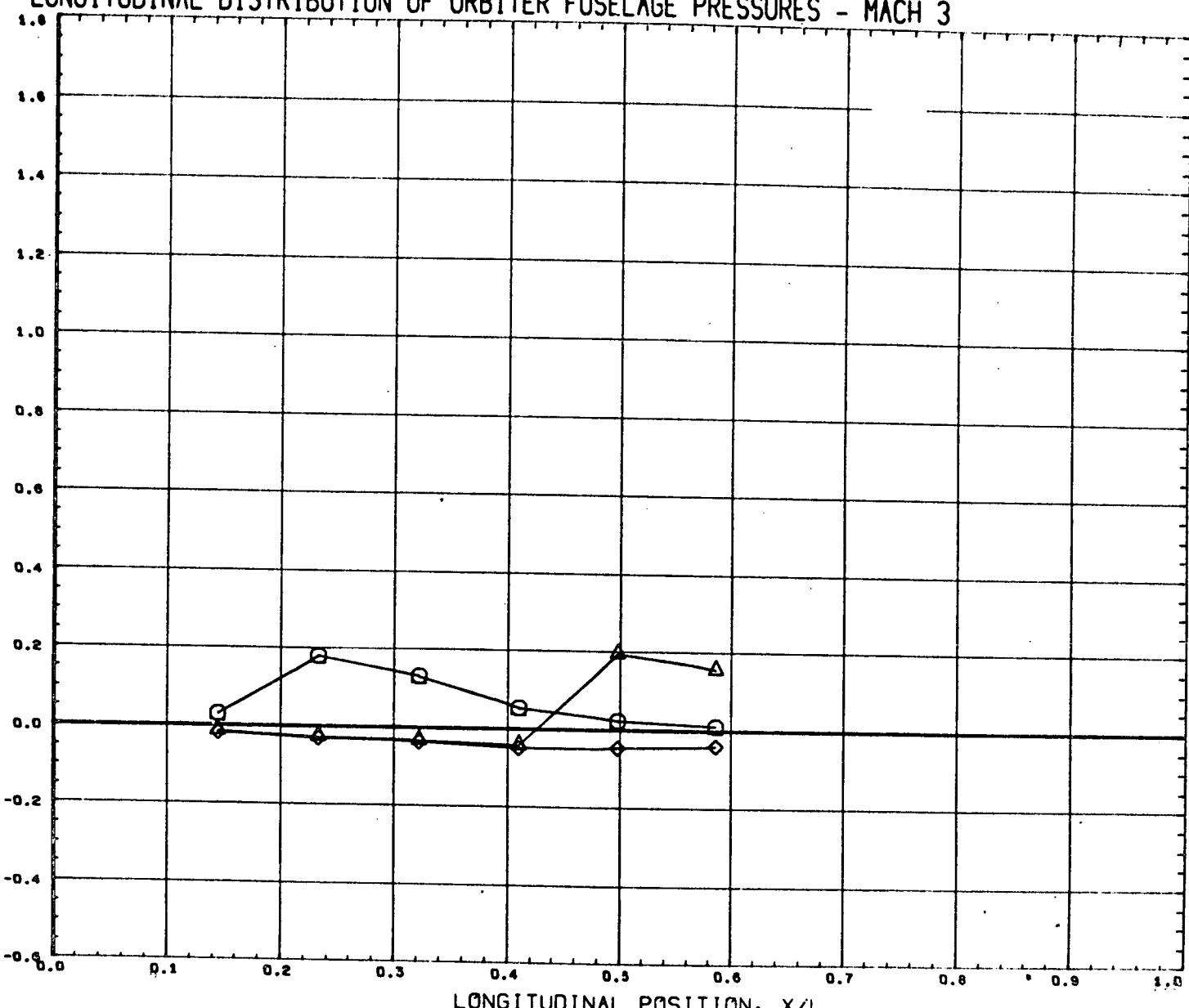
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PAGE 5

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 0.076 | 0.228 |
| △ | - 0.103 | - | - |
| ◊ | - 0.226 | - | - |

PARAMETRIC VALUES

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|--------|---------|--------|---------|
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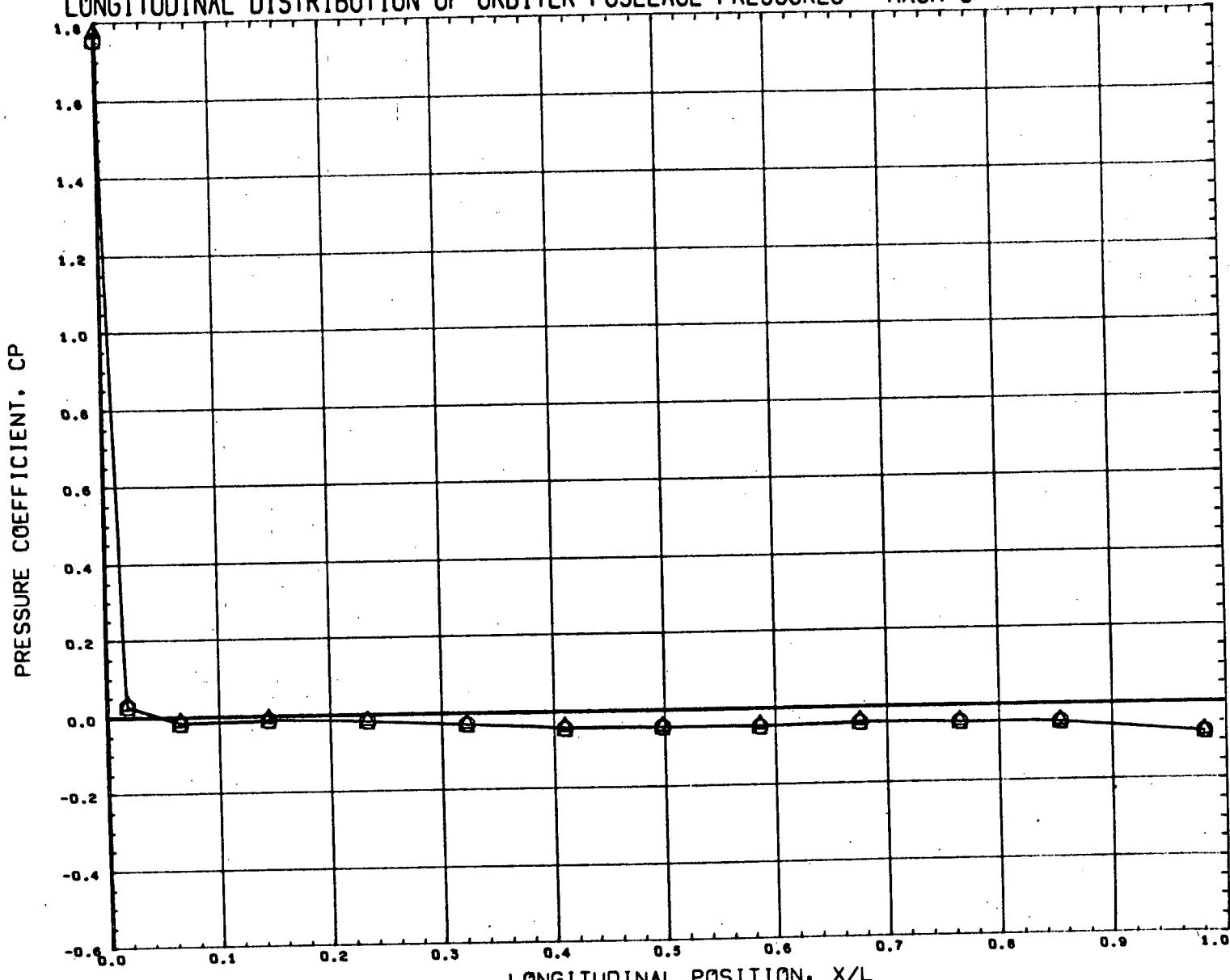
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PAGE

6

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



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△ 0.460

PARAMETRIC VALUES
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 BSTPOW 50.000

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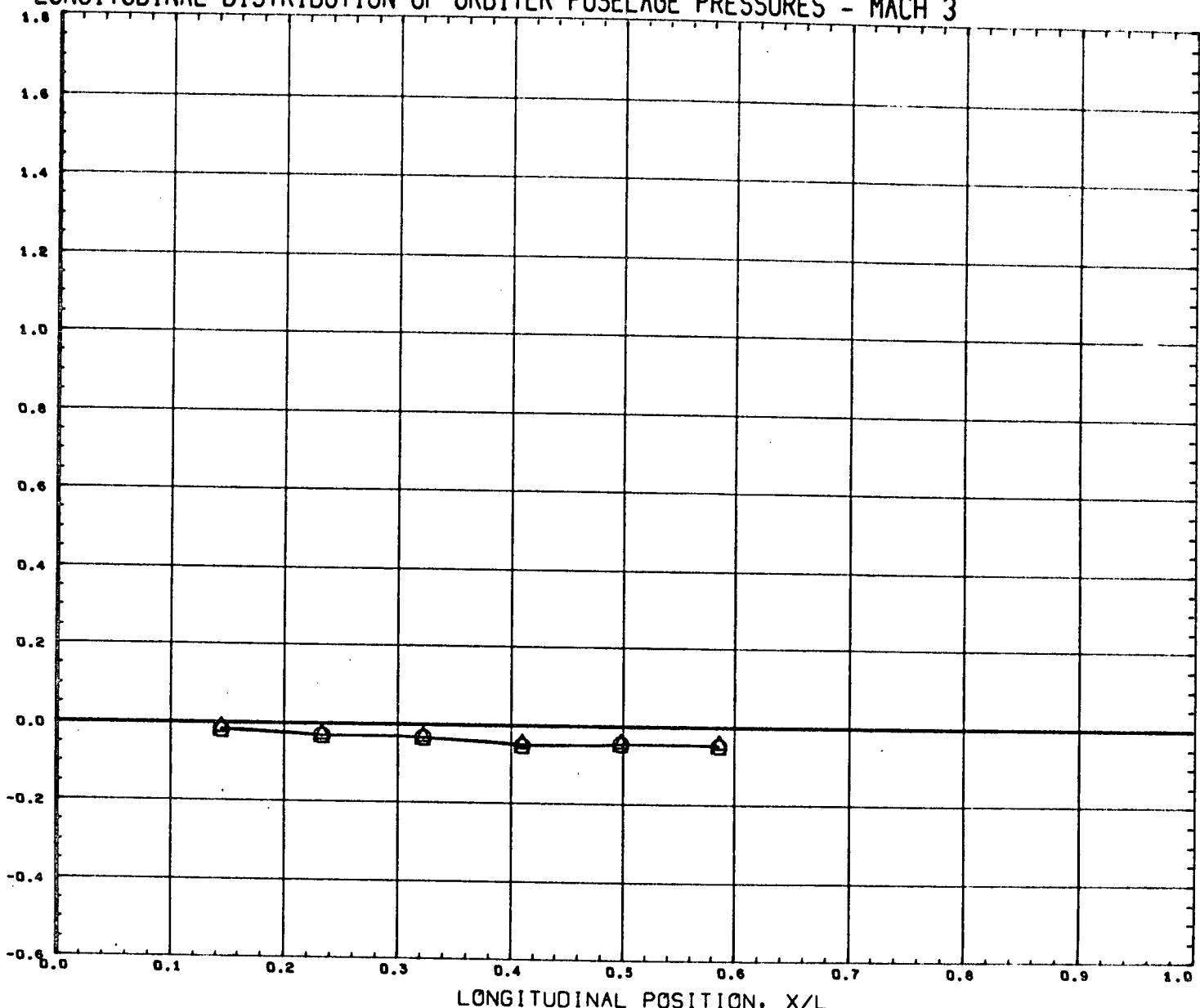
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PAGE

7

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ



- 0.390 0.076 0.908

△ 0.480

PARAMETRIC VALUES

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|---------|
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| BSTPOW | 50.000 | | |

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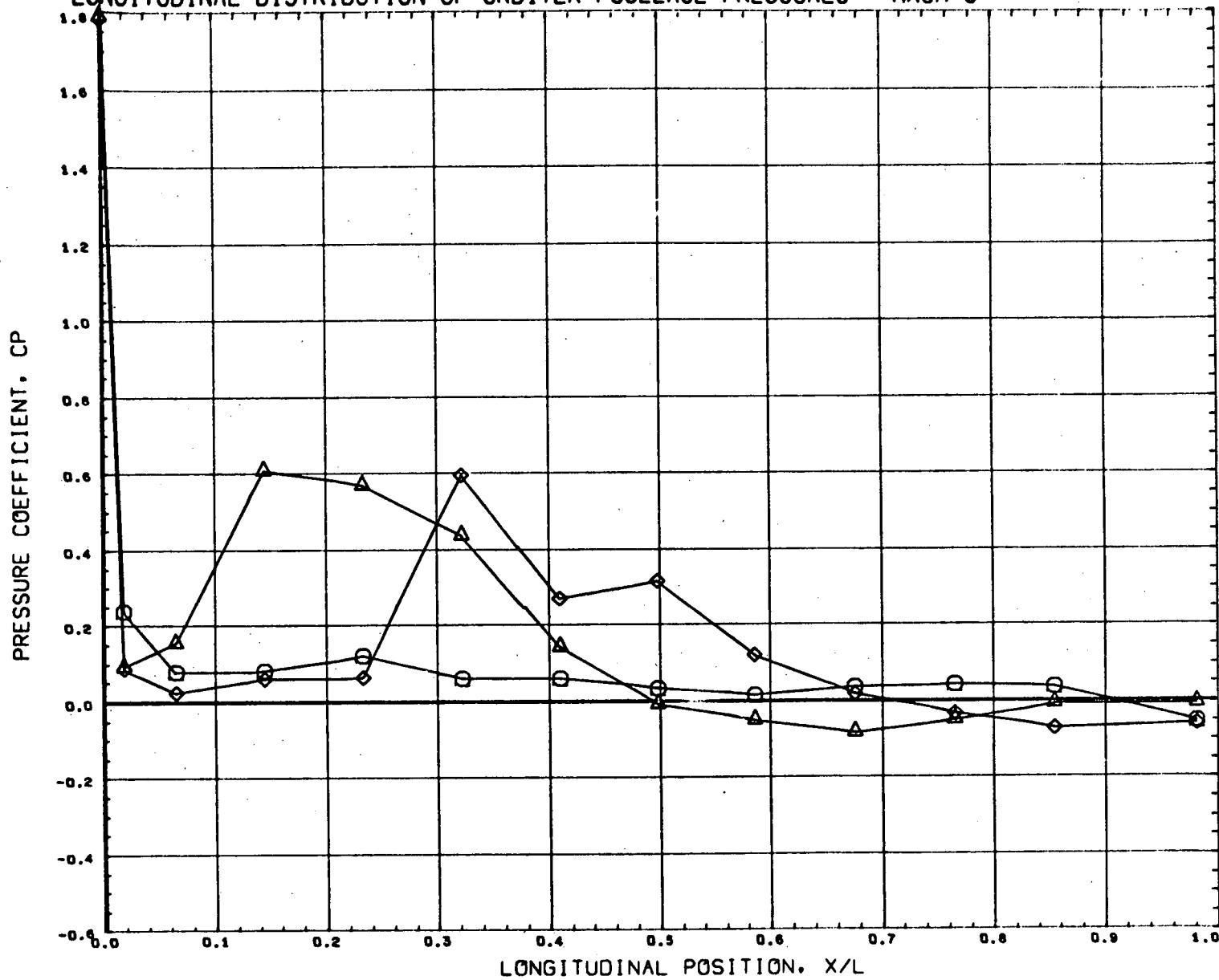
AEDC VA1163 MDAC ORBITER (BODY)

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PAGE

8

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ○ | -0.143 | 0.000 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
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| BSTPOW | 50.000 | |

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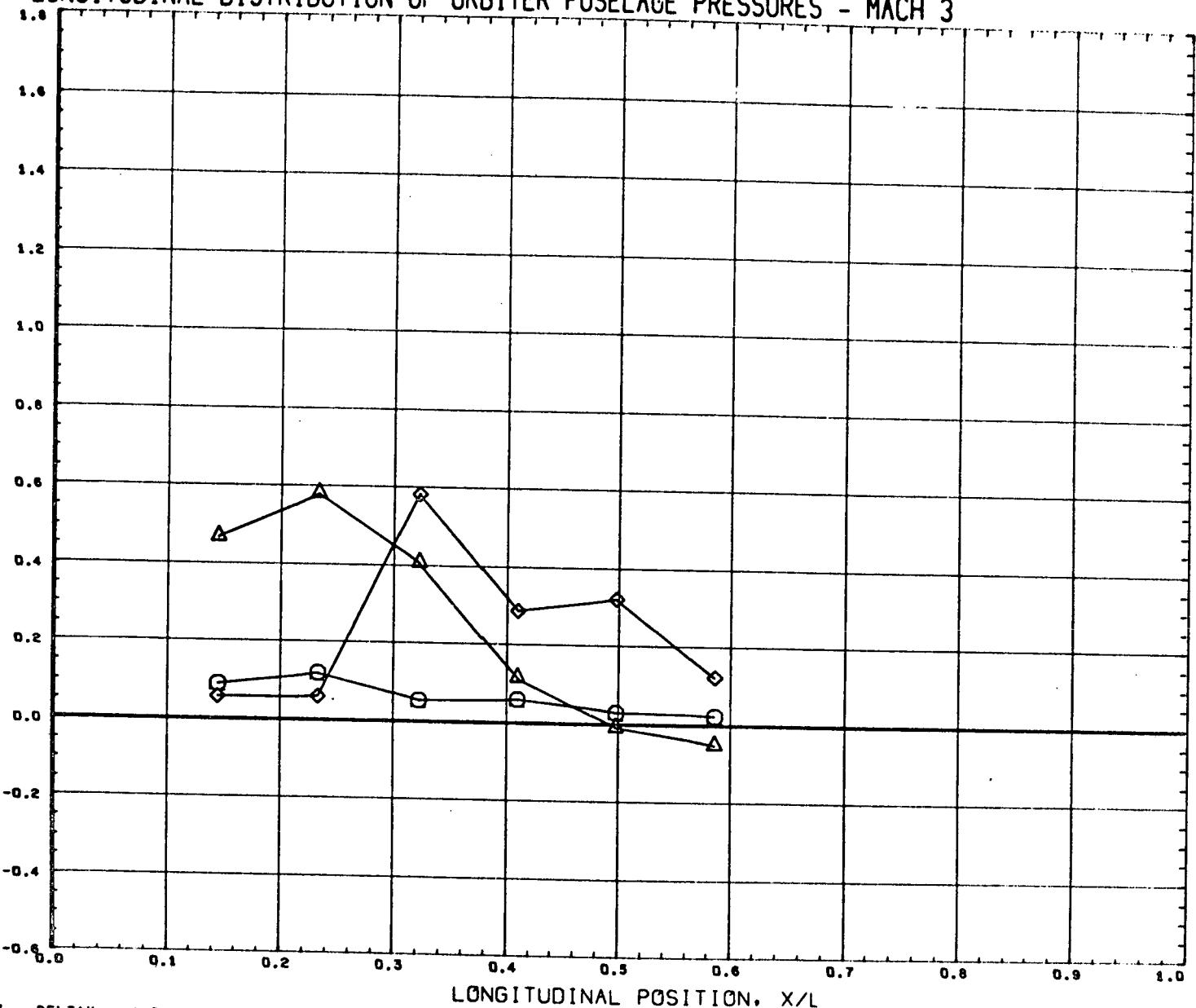
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PAGE

9

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

○ - 0.143 0.076 0.120
△ 0.103 0.226

PARAMETRIC VALUES

| | | | | |
|--------|---|--------|--------|---------|
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| ALPHAI | | 0.000 | ORBPOW | 100.000 |
| BSTPOW | | 50.000 | | |

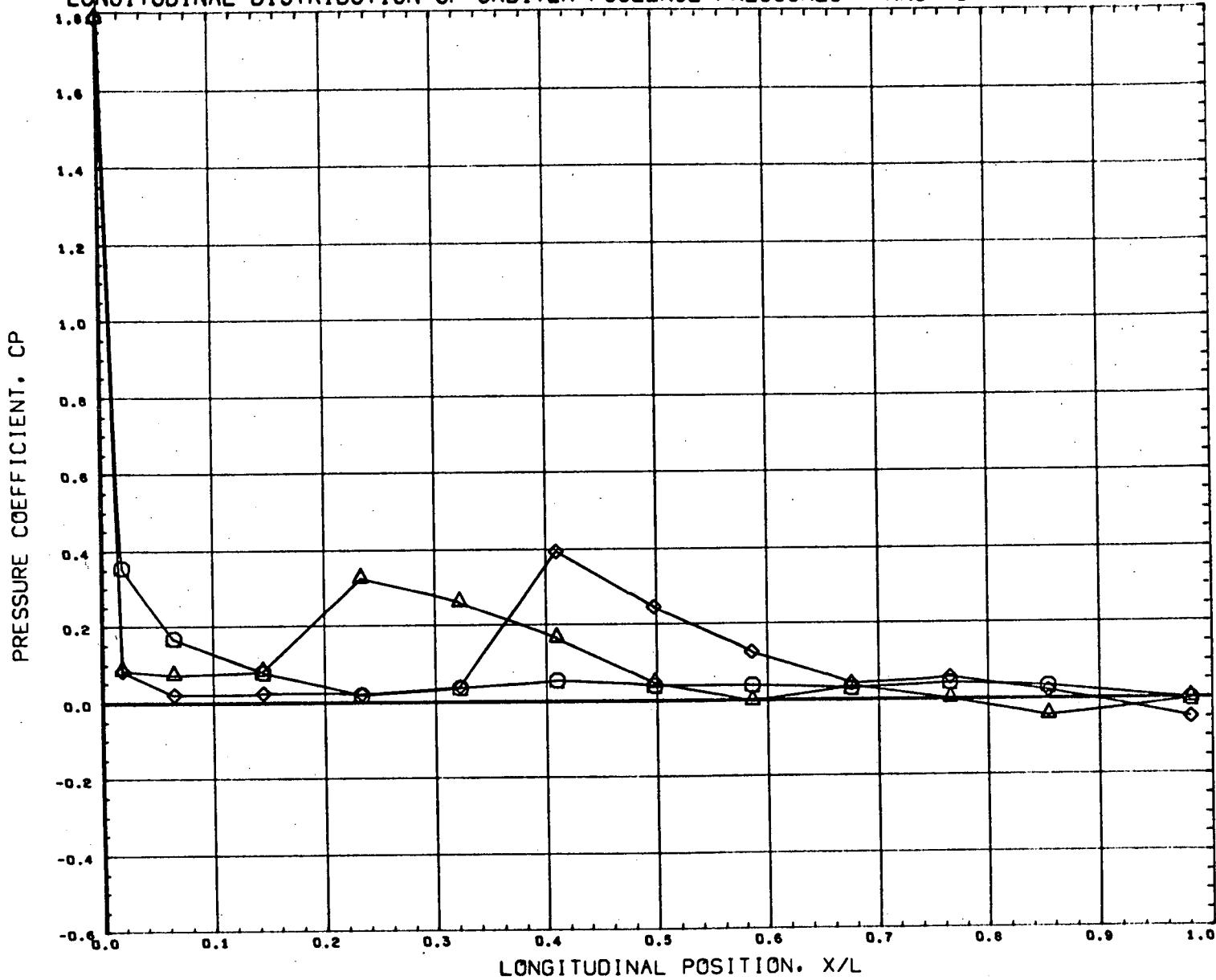
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AEDC VA1163 MDAC ORBITER (BODY)

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PAGE 10

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 -0.143 0.000 0.151
 0.103 0.227

PARAMETRIC VALUES
 ALPHAB - 4.945 MACH 3.000
 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

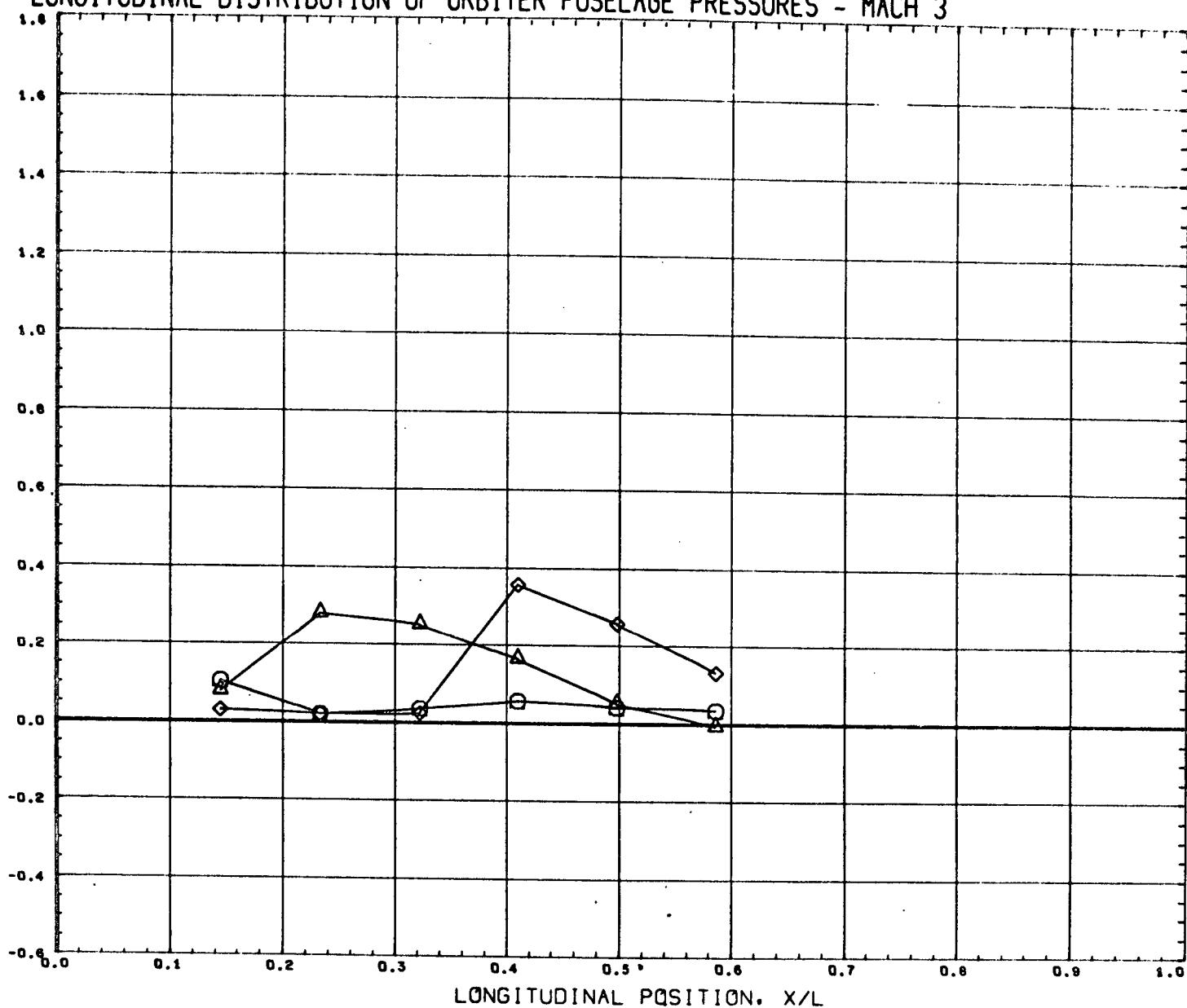
REFERENCE FILE
 AEDC VA1163 MDAC ORBITER (BODY)

•FT8312•

PAGE 11

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 0.076 | 0.151 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|---------|
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| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

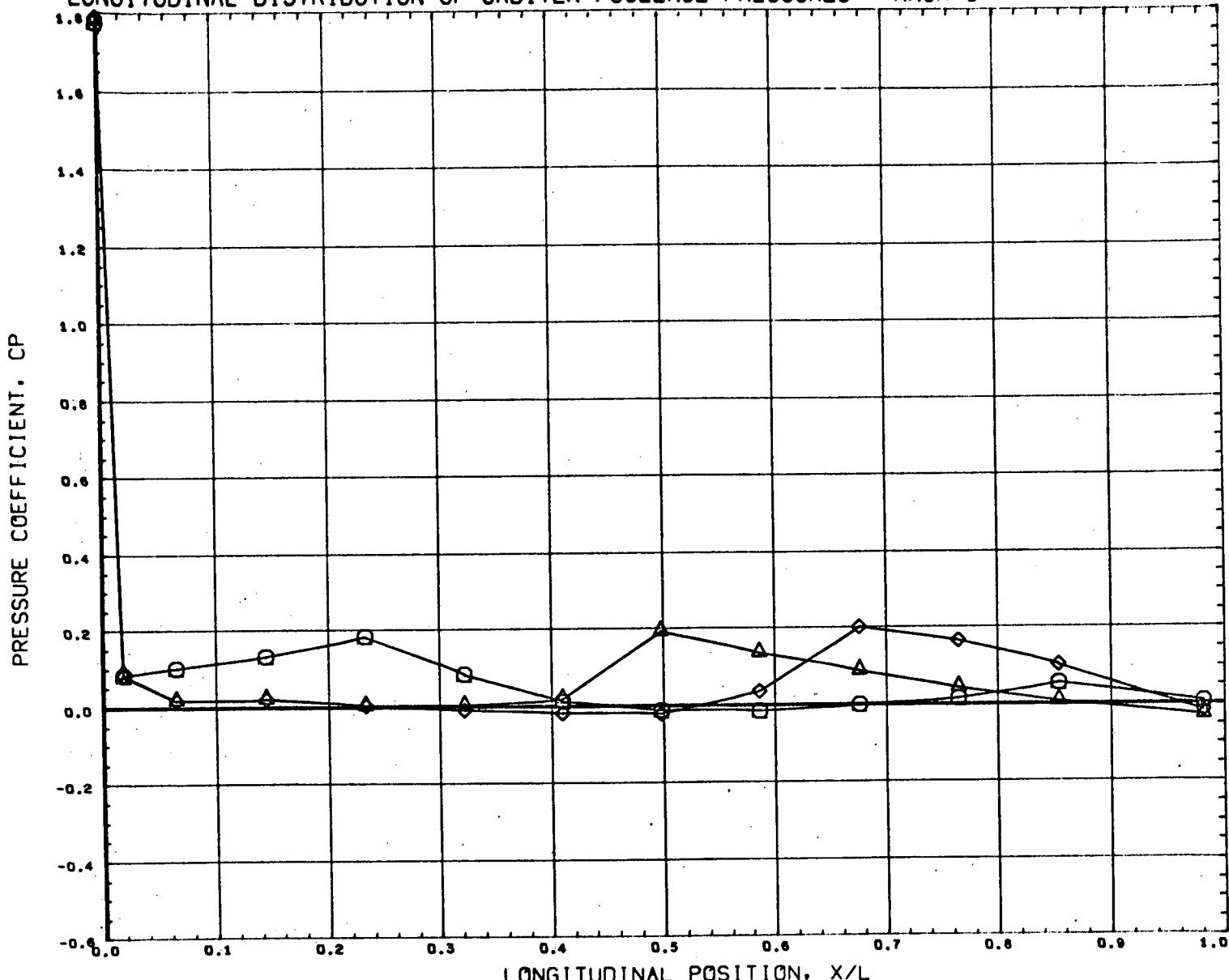
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

•FT8312•

PAGE 12

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



| SYMBOL | DELTAX | Y/B | DELTAZ |
|-------------|---------|-------|--------|
| \square | - 0.143 | 0.000 | 0.228 |
| \triangle | 0.103 | | |
| \diamond | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|----------------|
| ALPHAB | - 4.945 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

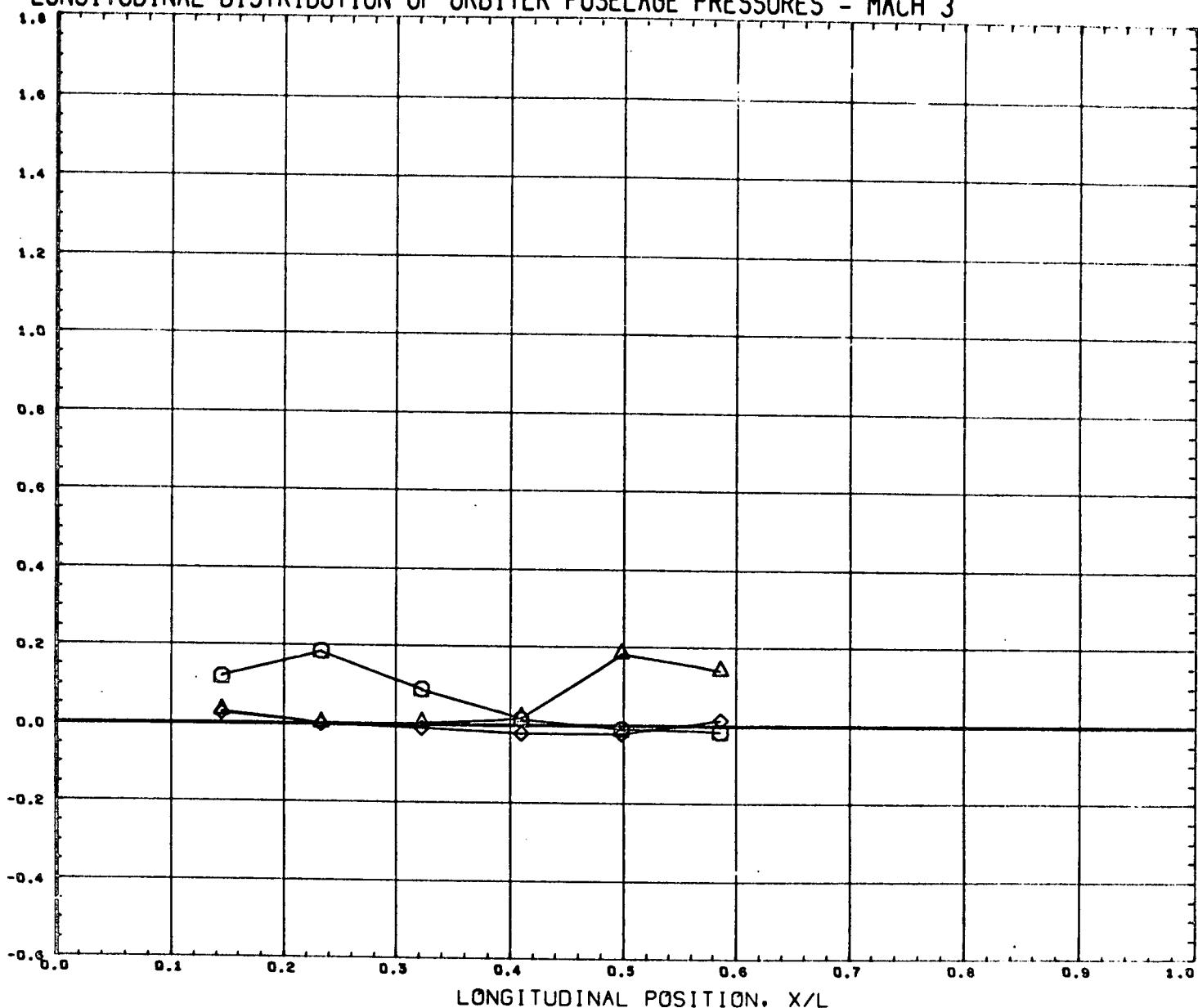
AEDC VA1163 MDAC ORBITER (BODY)

•FT8312•

PAGE 13

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

△ - 0.143 0.076 0.228

 0.103

◊ 0.226

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|---------|
| ALPHAB | = 4.945 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

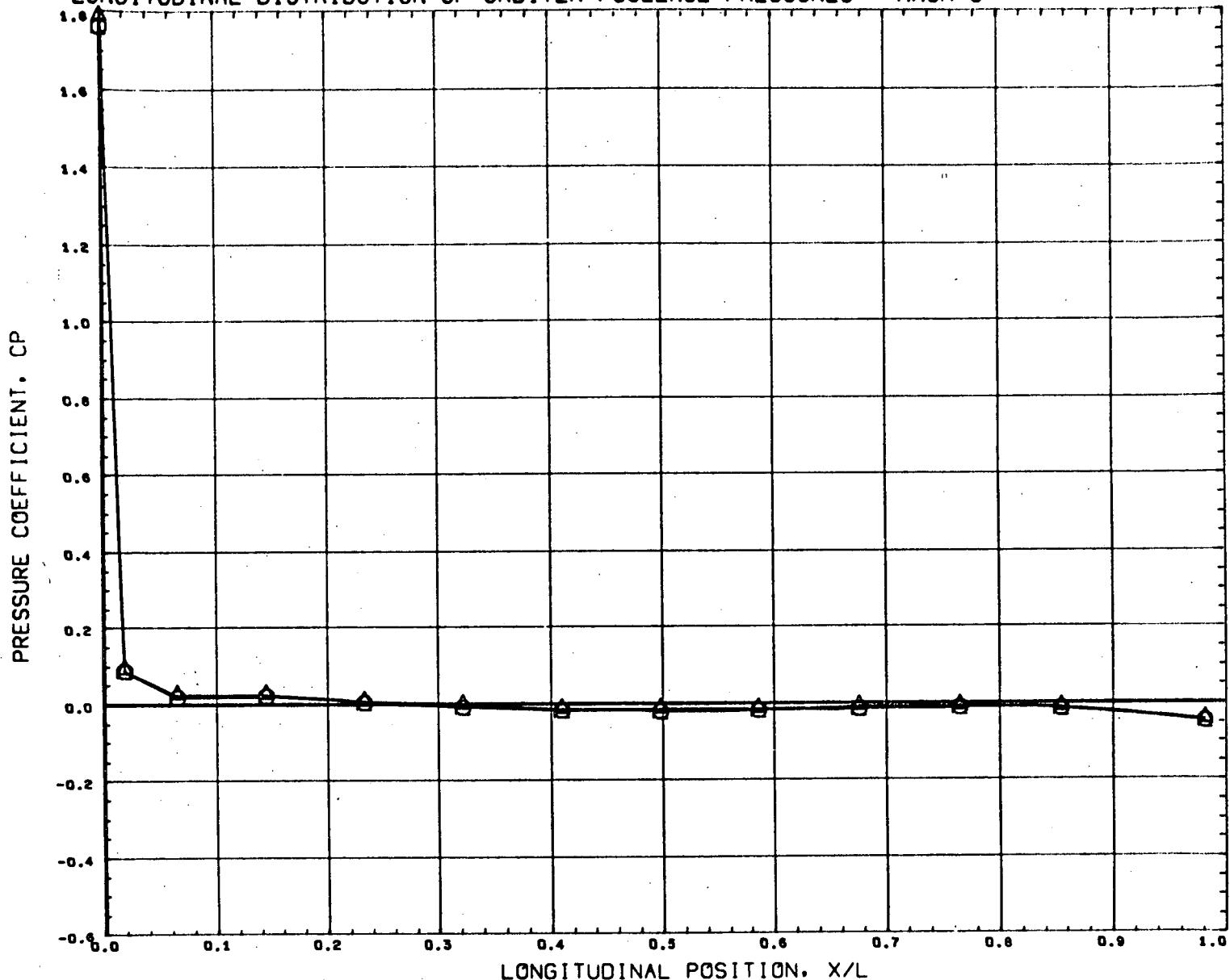
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

•FT8312•

PAGE 14

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O - 0.390 0.000 0.908
 △ 0.478

PARAMETRIC VALUES
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 ALPHAI = 0.000 ORBPOW 100.000
 BSTPOW = 50.000

REFERENCE FILE

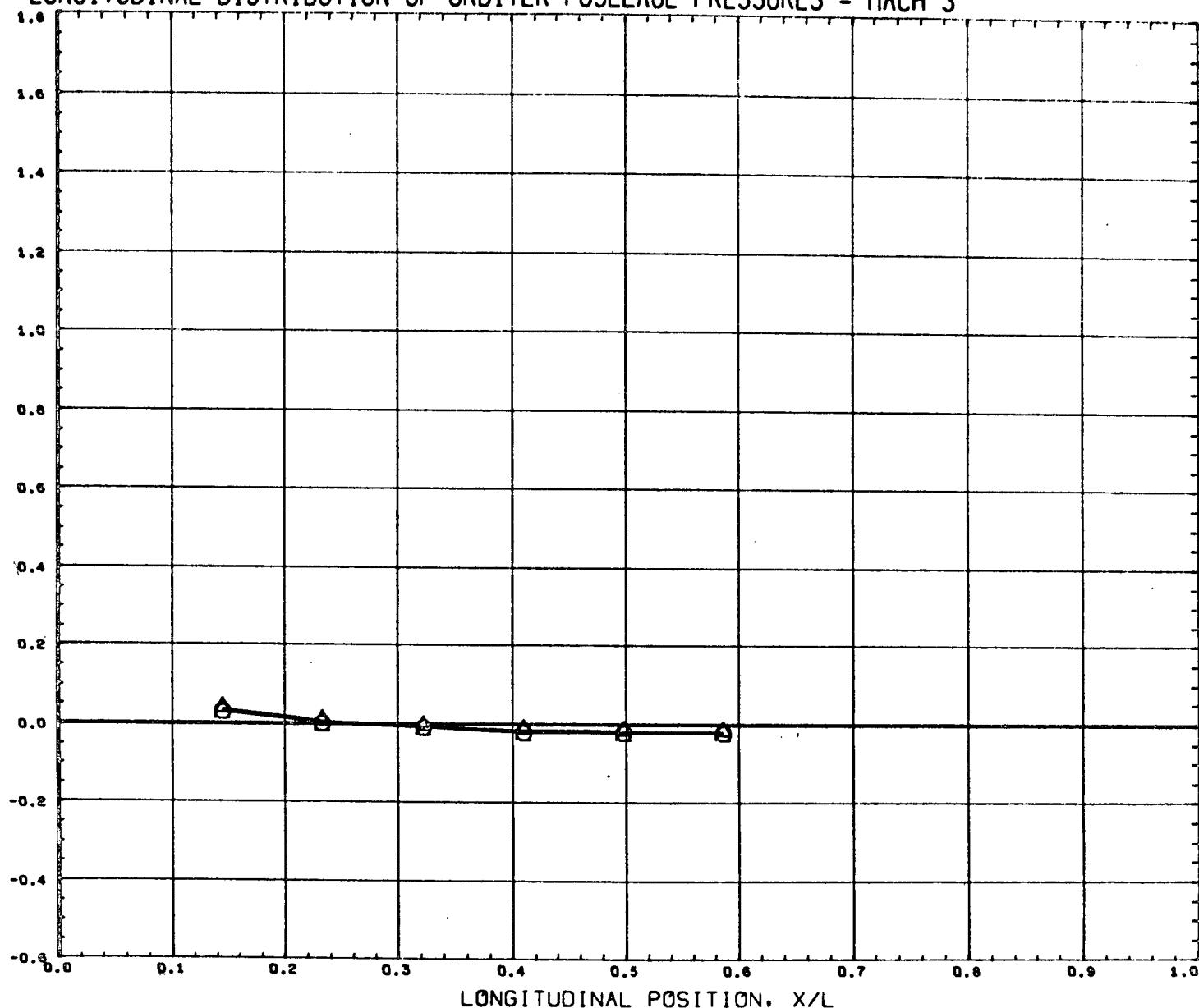
AEDC VA1163 MDAC ORBITER (BODY)

•FT8312•

PAGE 15

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
○ - 0.390 0.076 0.908
△ 0.476

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
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| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

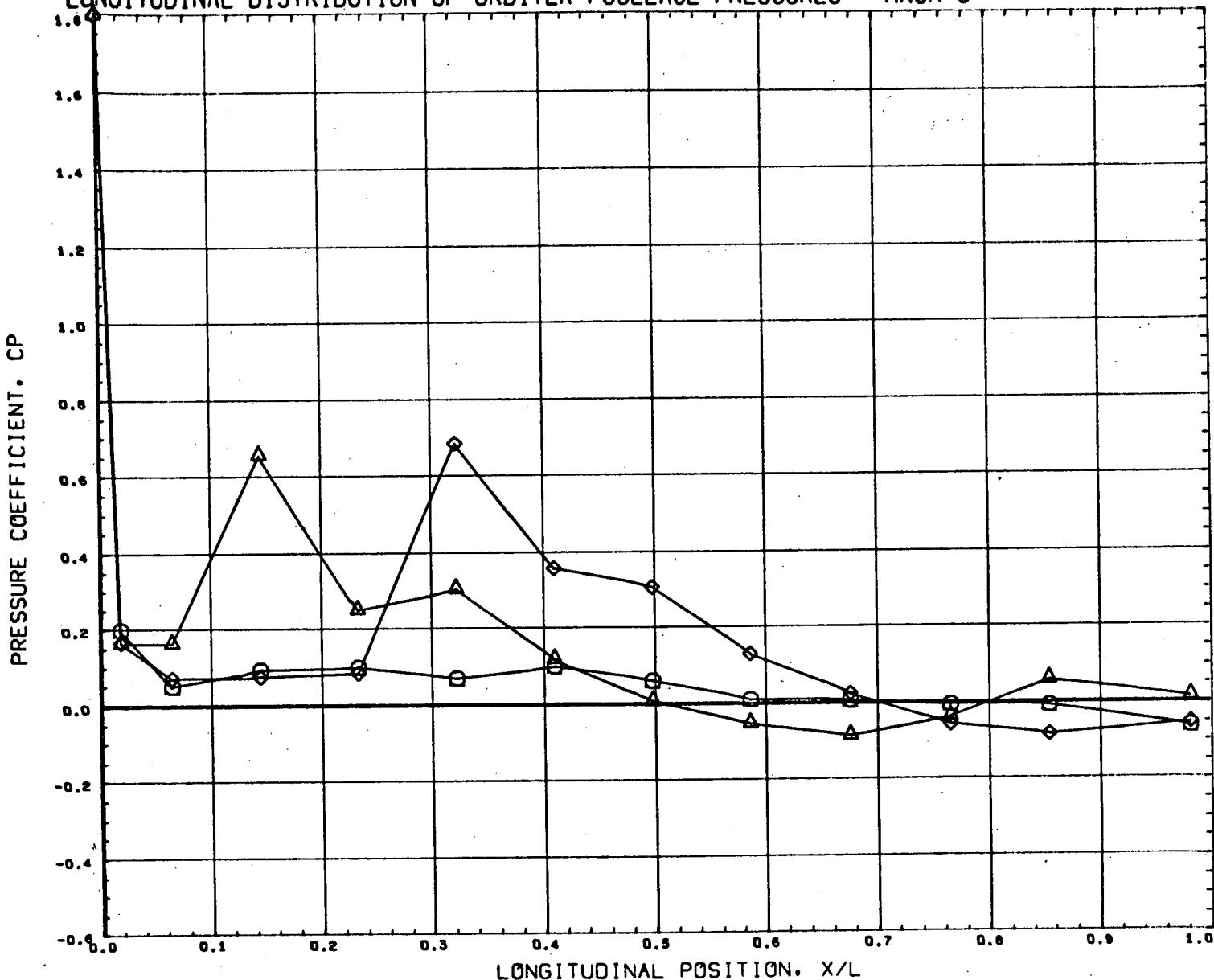
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

•FT8312•

PAGE 16

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|--------|-------|-------|
| ○ | -0.143 | 0.000 | 0.120 |
| △ | 0.102 | | |
| ◊ | 0.228 | | |

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|---------|
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| BSTPOW | 50.000 | | |

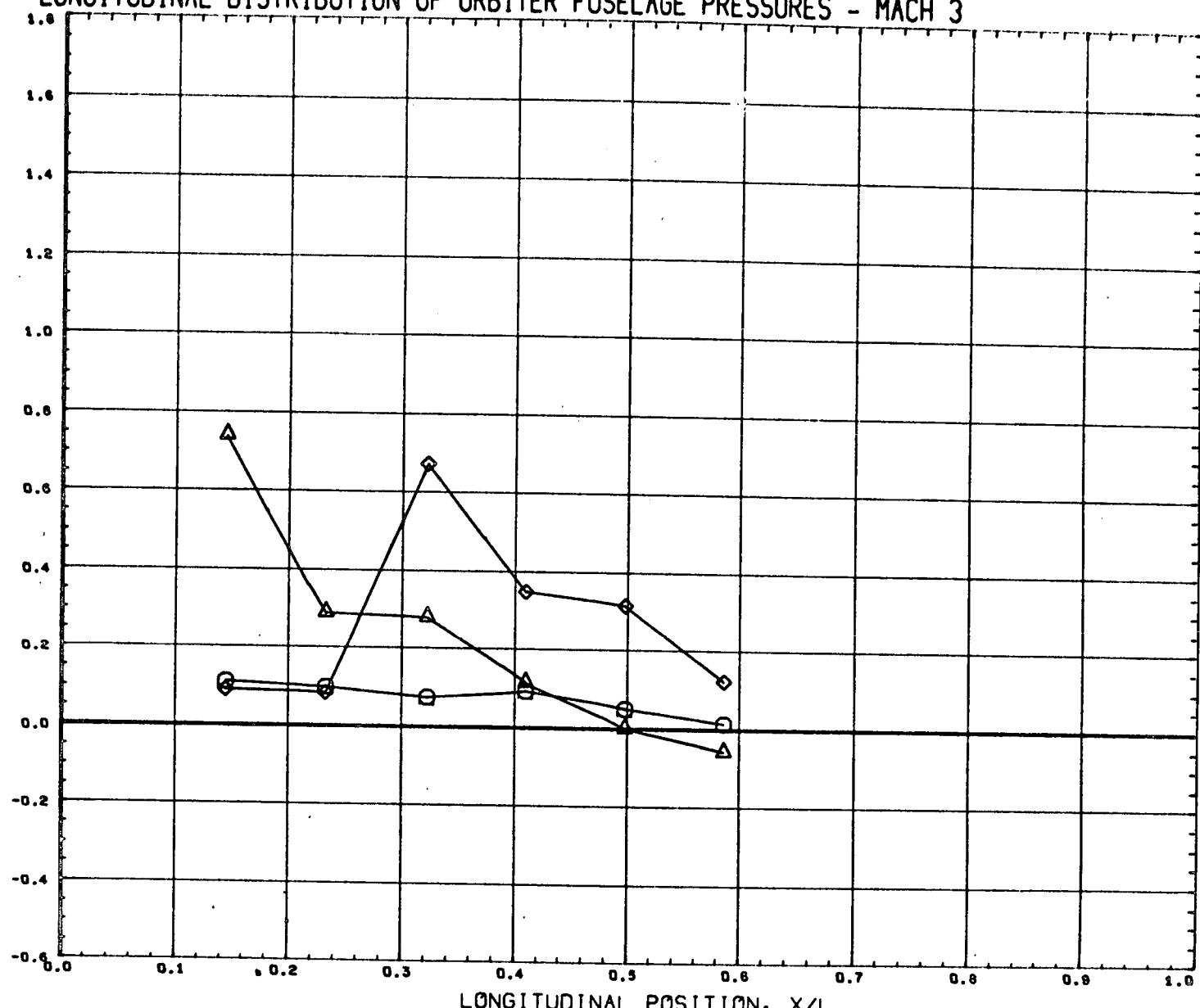
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AEDC VA1163 MDAC ORBITER (BODY)

•FT8313•

PAGE 17

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX Y/B DELTAZ
 ▲ 0.143 0.076 0.120
 ○ 0.102 0.076 0.080
 ◇ 0.226 0.076 0.120

PARAMETRIC VALUES
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 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

REFERENCE FILE

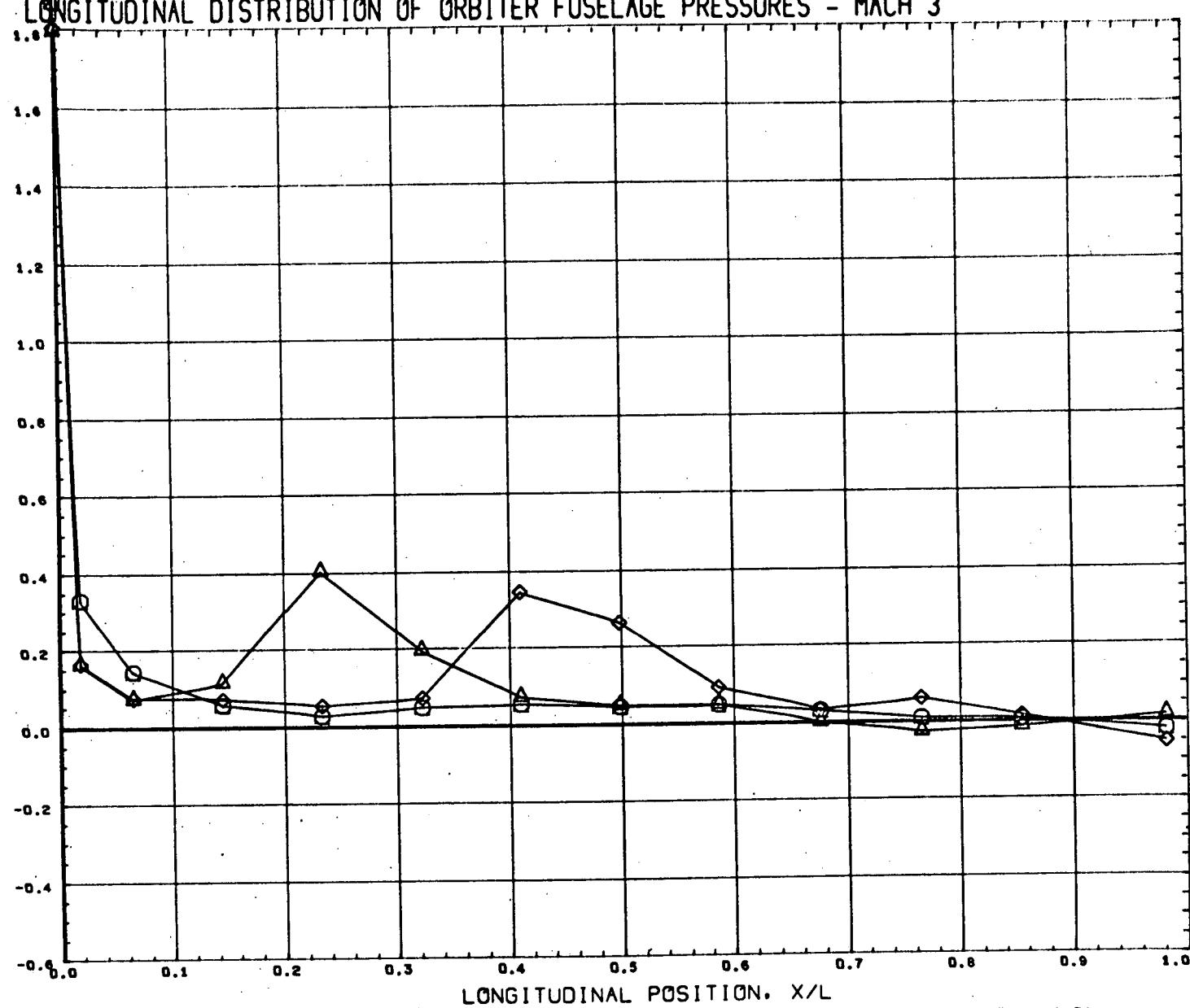
AEDC VA1163 MDAC ORBITER (BODY)

•FT8313•

PAGE 18

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---|-------|-------|
| ○ | - | 0.144 | 0.000 |
| △ | - | 0.103 | 0.151 |
| ◊ | - | 0.225 | |

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|---------|
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| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

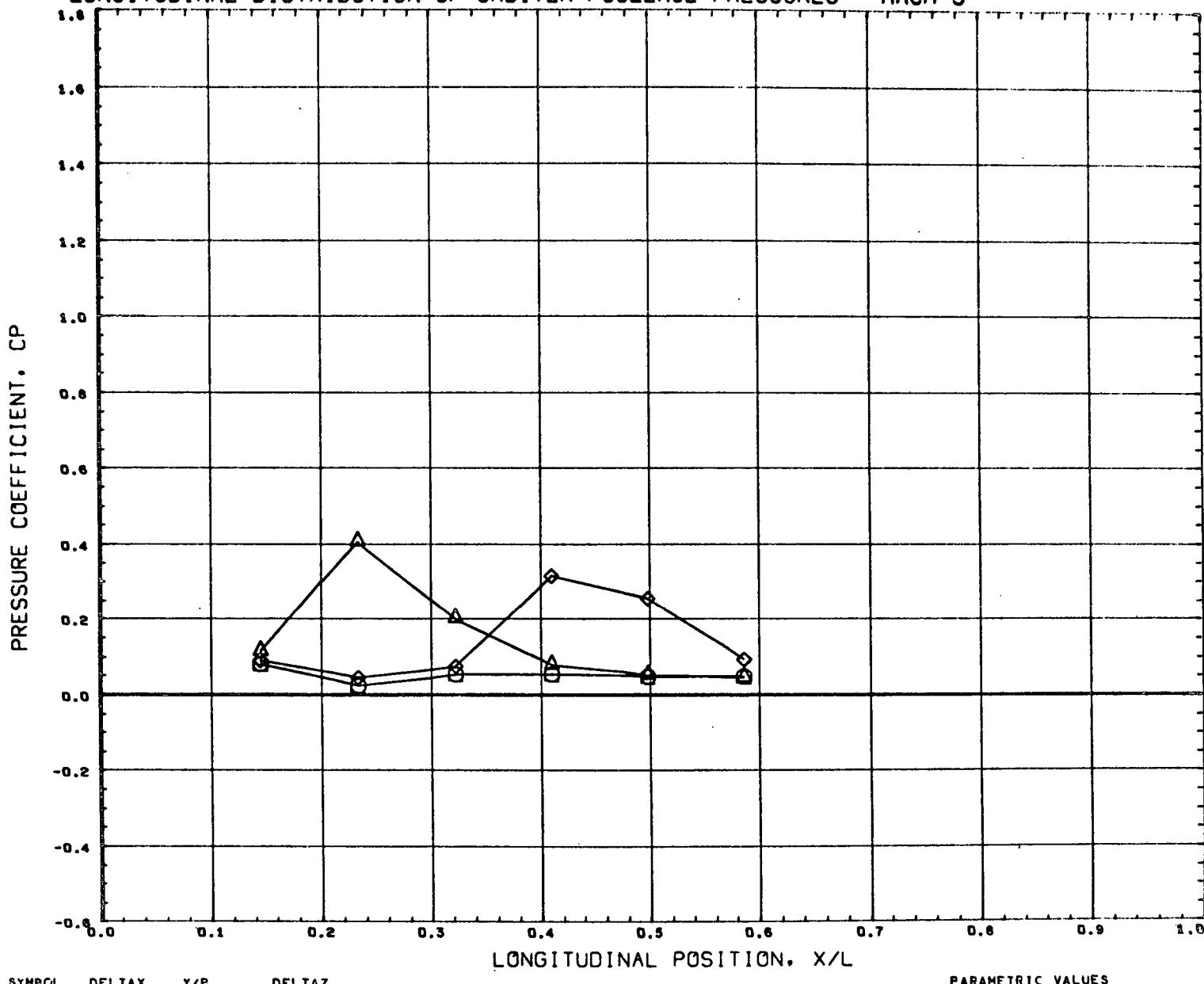
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AEDC VA1163 MDAC ORBITER (BODY)

•FT8313•

PAGE 19

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

△ - 0.144 0.076 0.151
 0.103
 0.225

PARAMETRIC VALUES

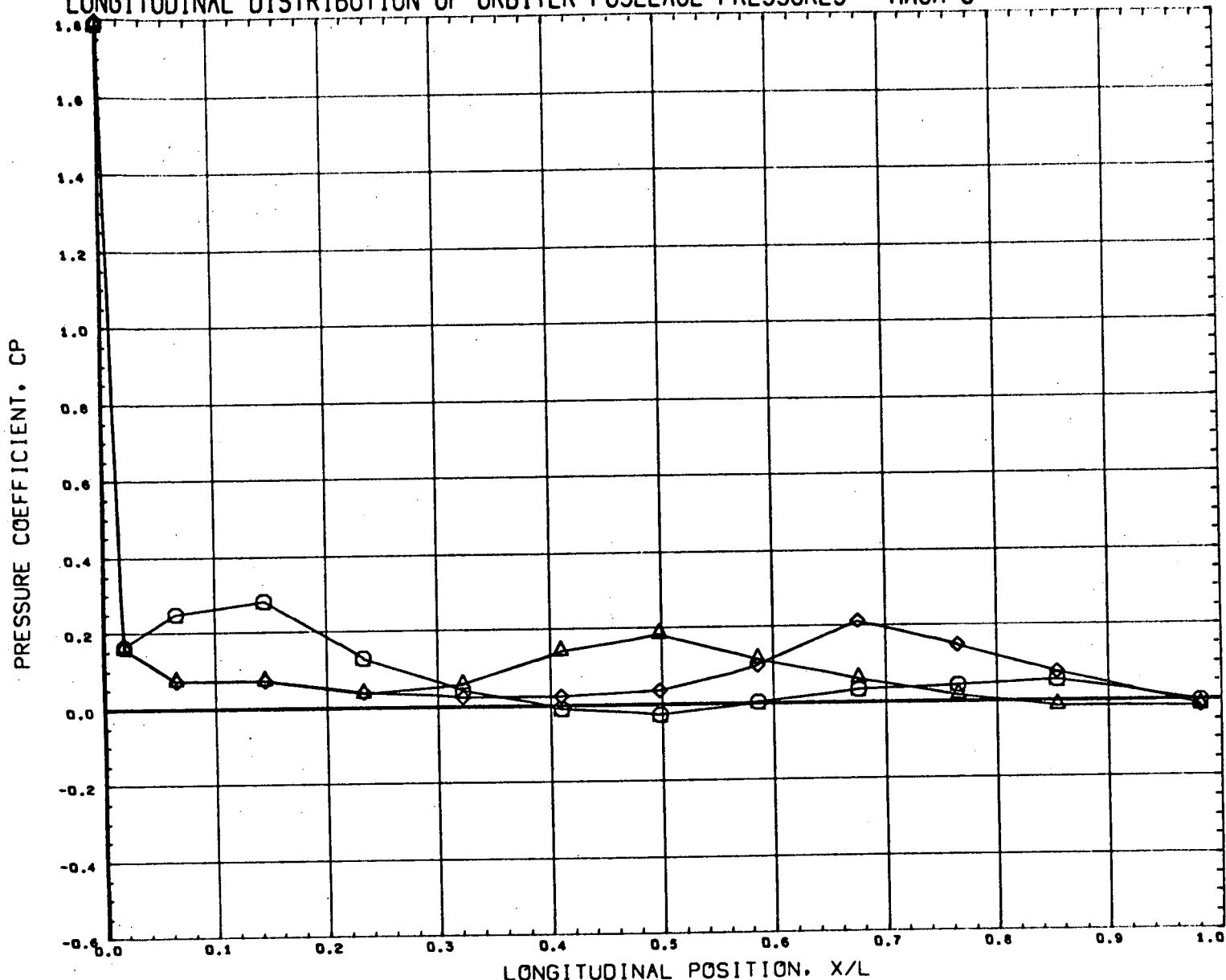
| | | | |
|--------|--------|--------|---------|
| ALPHAB | 0.008 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE
 AEDC VA1163 MDAC ORBITER (BODY)

•FT8313•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 - 0.144 0.000 0.228
 O 0.103 0.103 0.227

PARAMETRIC VALUES
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 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

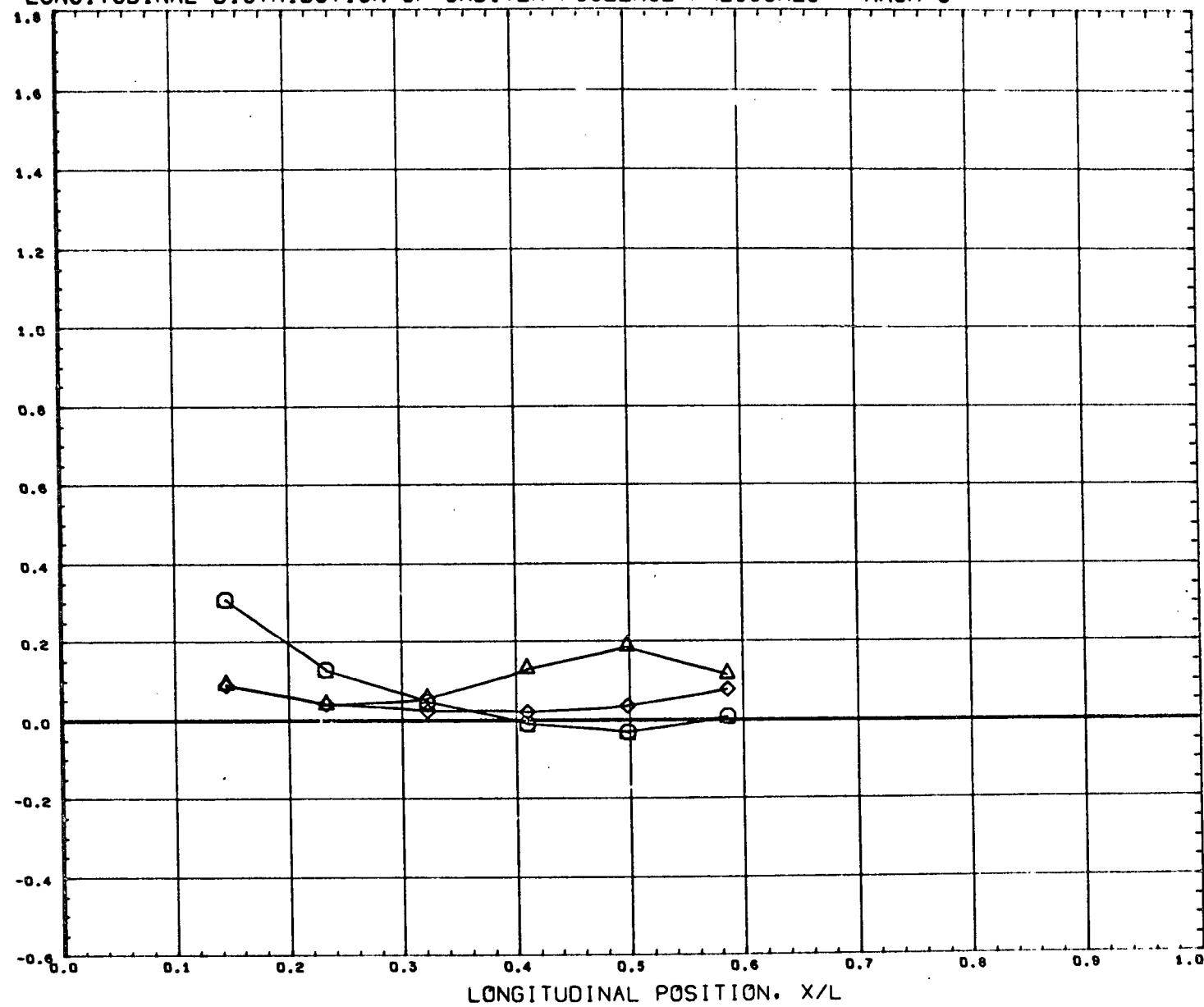
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 AEDC VA1163 MDAC ORBITER (BODY)

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PAGE 21

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.144 | 0.076 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 0.008 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

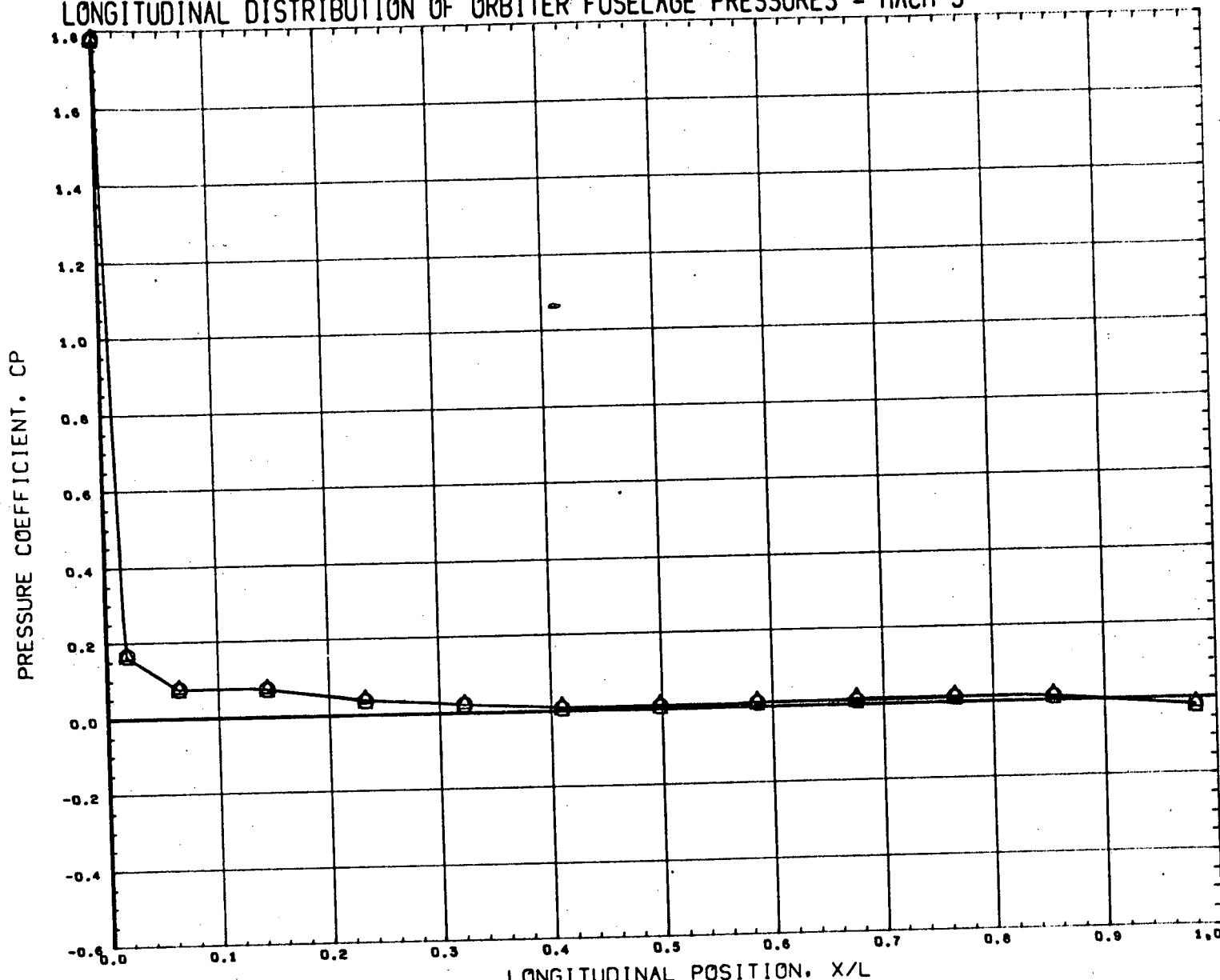
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AEDC VA1163 MDAC ORBITER (BODY)

•FT8313•

PAGE 22

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



PARAMETRIC VALUES

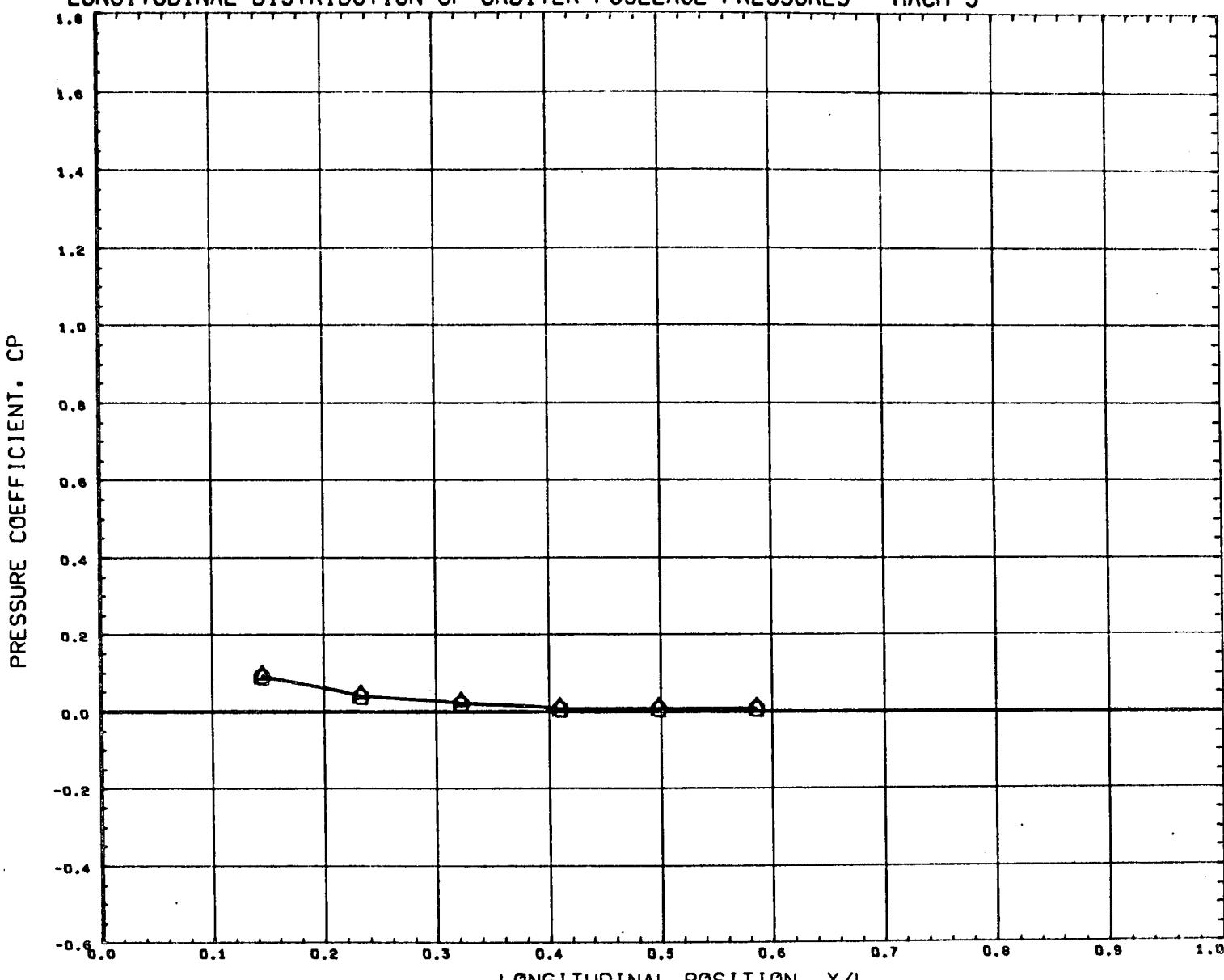
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|--|---------------|----------------|
| | 0.008 | 3.000 |
| | 0.000 | ORBPOW 100.000 |
| | BSTPOW 50.000 | |

REFERENCE FILE
AEDC VA1163 MDAC ORBITER (BODY)

•FT8313•

PAGE 23

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O - 0.390 0.076 0.908
 Δ - 0.479

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|---------|
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

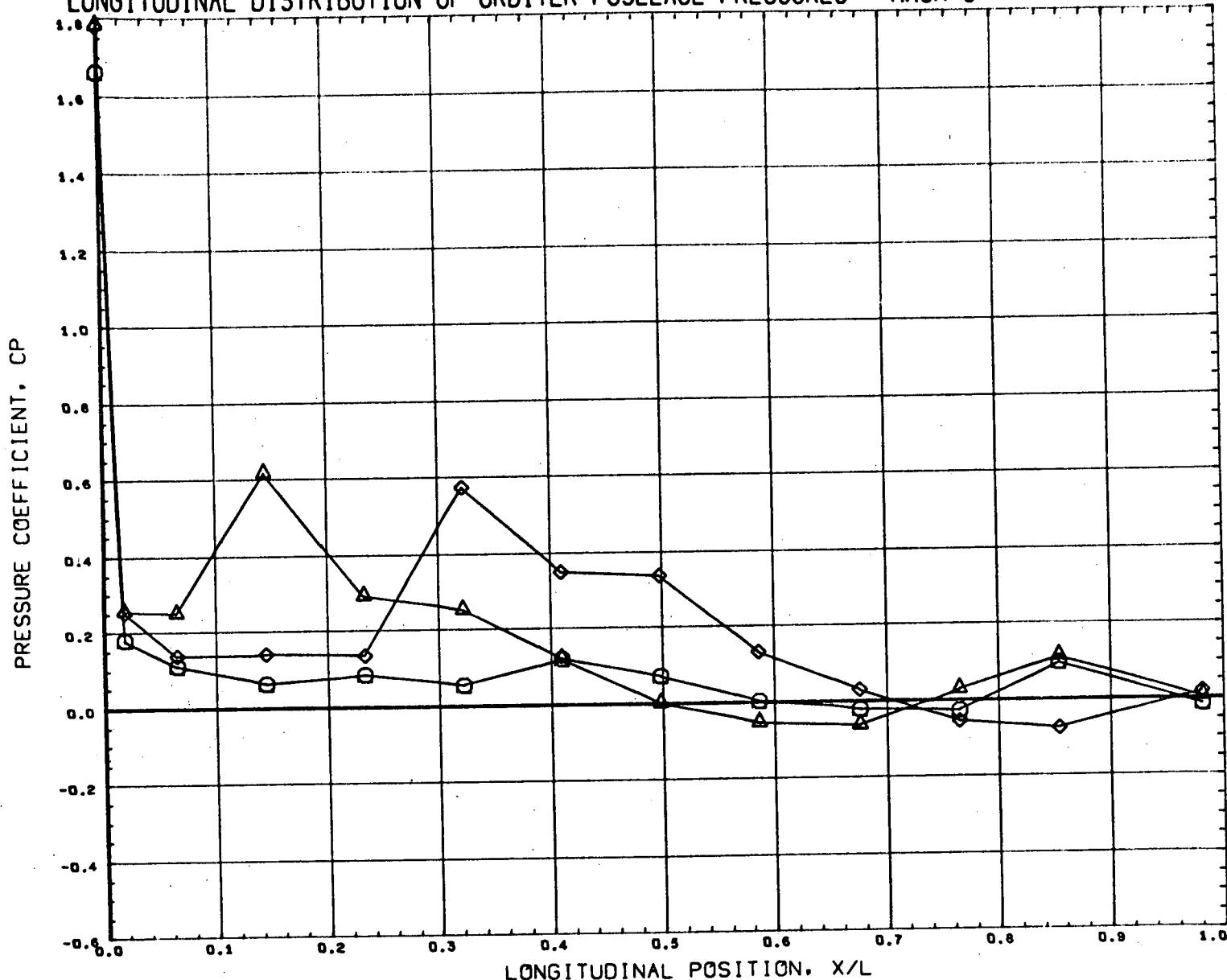
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•FT8313•

PAGE 24

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



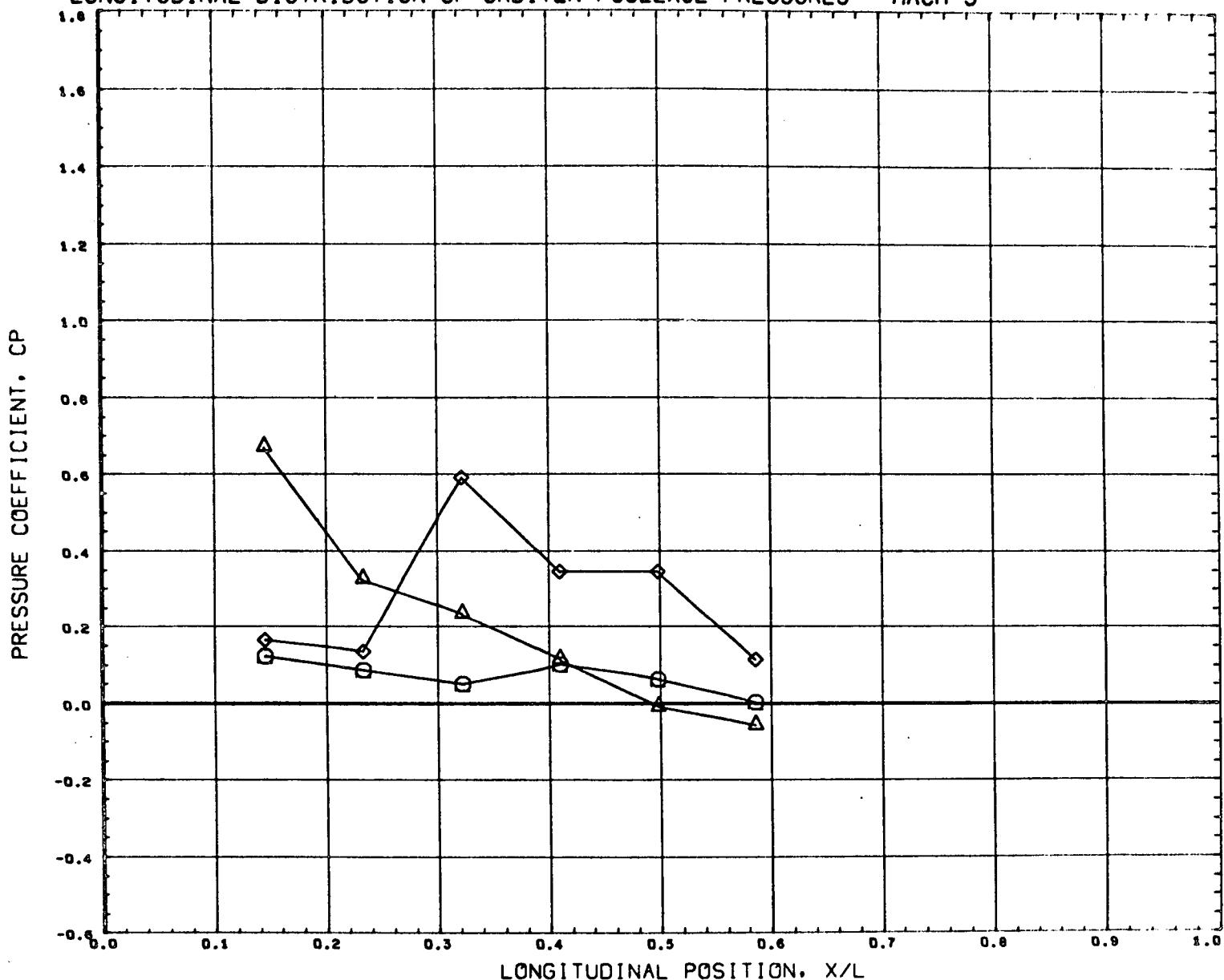
| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|---------|
| ALPHAB | 5.017 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE
AEDC VA1163 MDAC ORBITER (BODY)

•FT8314•

PAGE 25

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | | |
|---|---|-------|-------|-------|
| ○ | - | 0.143 | 0.076 | 0.120 |
| △ | | 0.103 | | |
| ◊ | | 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|---------|
| ALPHAB | 5.017 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

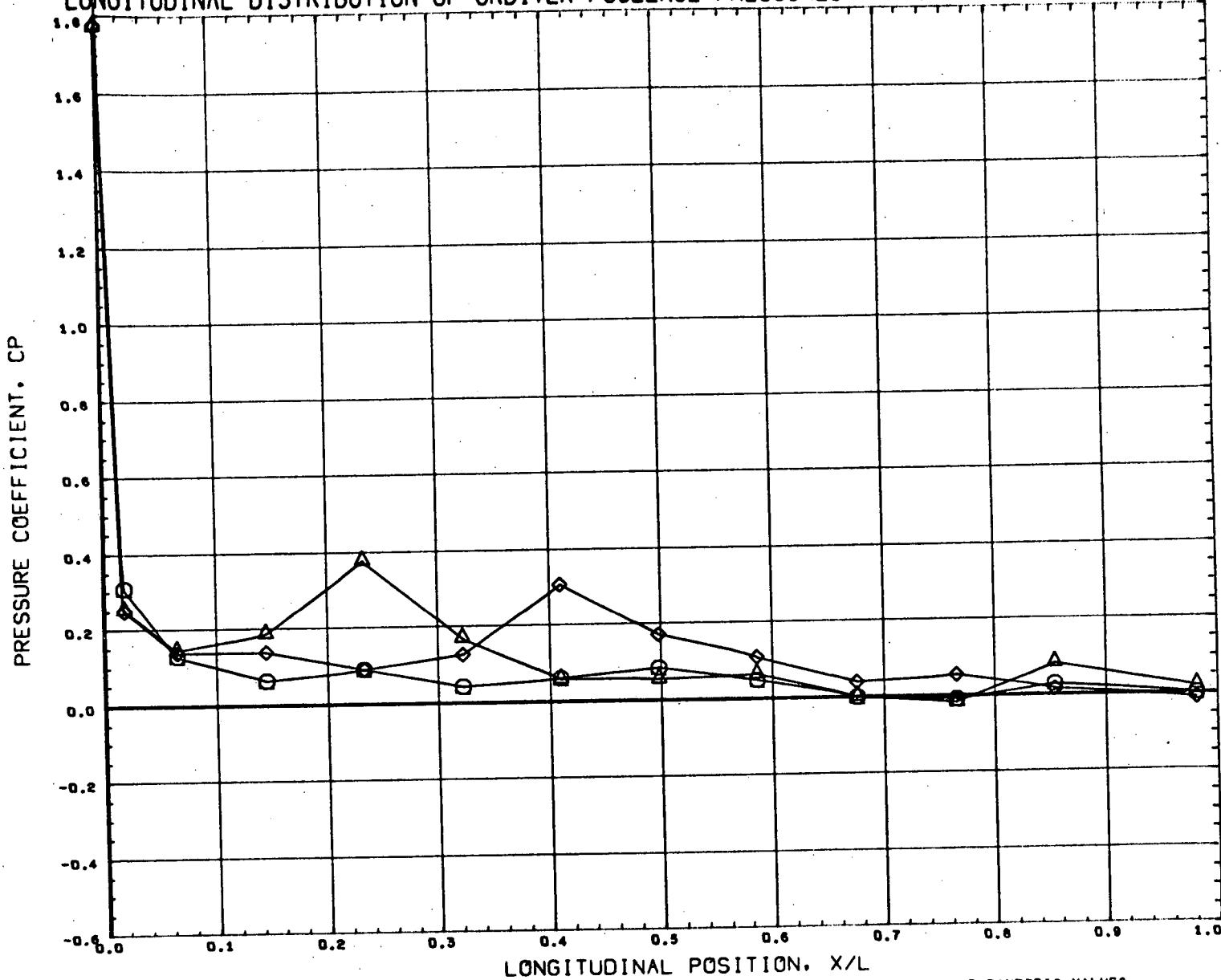
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AEDC VA1163 MDAC ORBITER (BODY)

•FT8314•

PAGE 26

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | -0.144 | 0.000 | 0.151 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 5.017 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

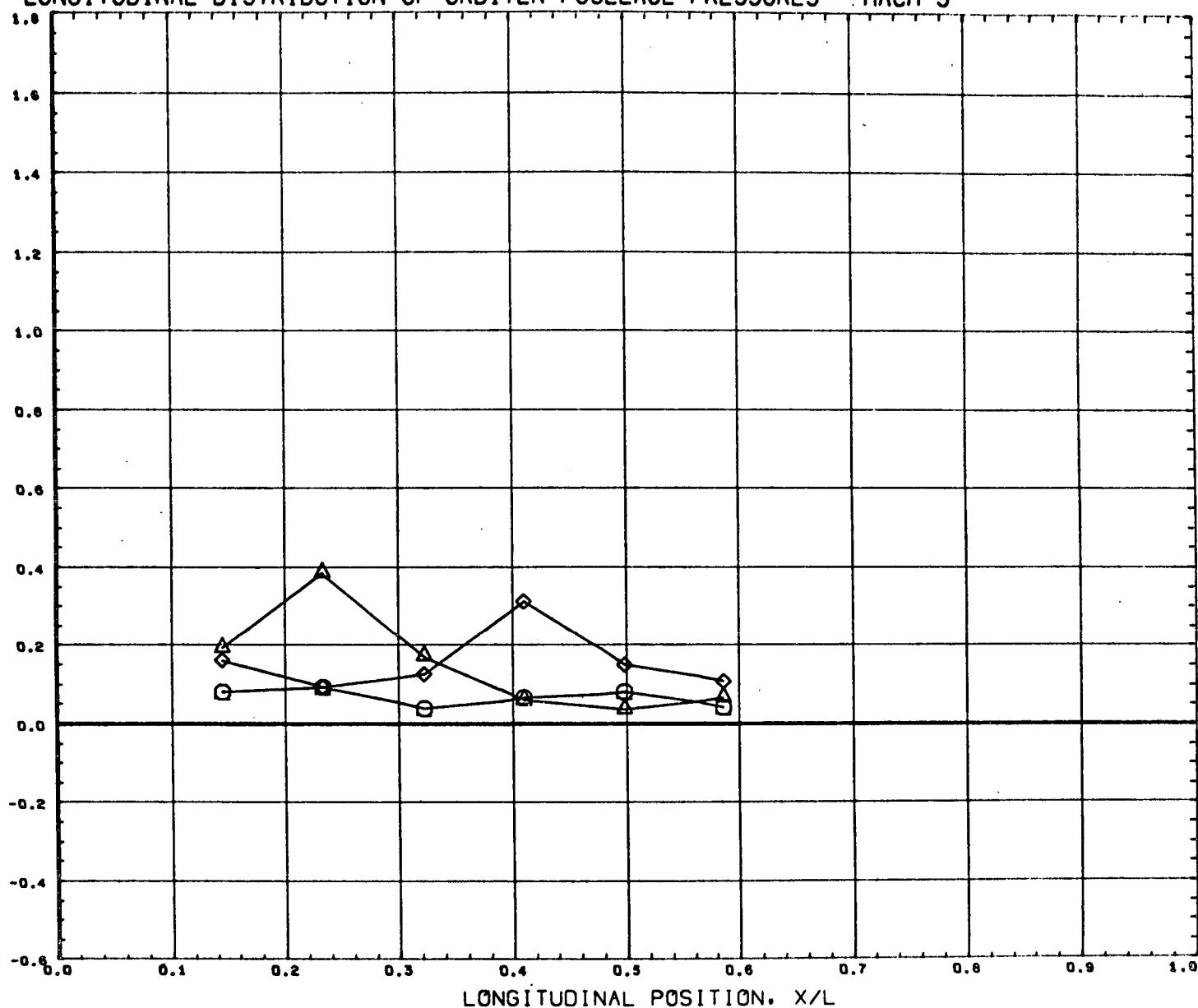
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AEDC VA1163 MDAC ORBITER (BODY)

•FT8314•

PAGE 27

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT • CP



SYMBOL DELTAX Y/B DELTAZ

- - 0.144 0.076 0.151
- △ - 0.103
- ◊ - 0.226

PARAMETRIC VALUES

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|---------|
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

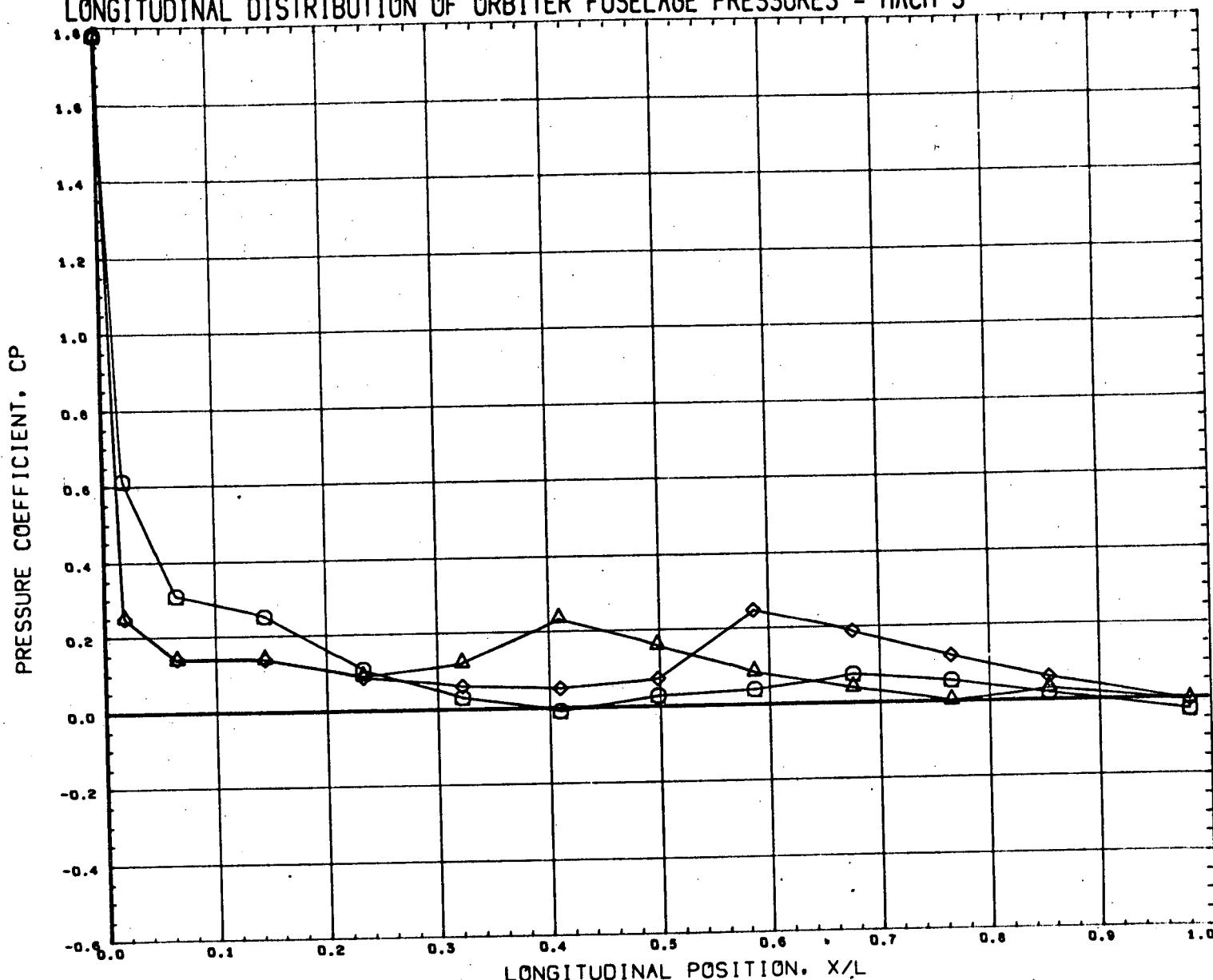
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

•FT8314•

PAGE 28

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

 - 0.144 0.000 0.228

 - 0.103 0.000 0.228

 - 0.227 0.000 0.228

PARAMETRIC VALUES

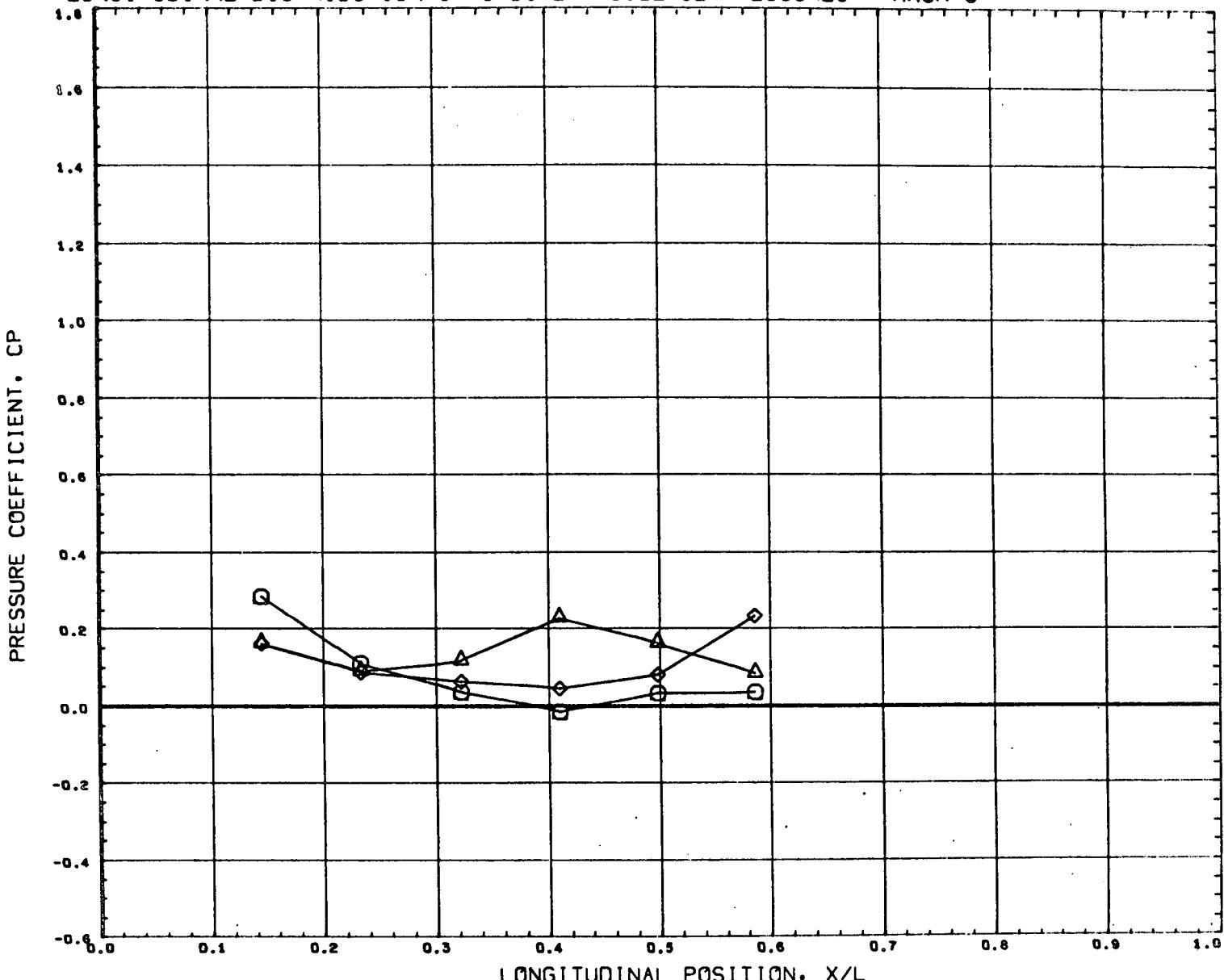
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|--------|--------|--------|---------|
| ALPHAB | 5.017 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE
AEDC VA1163 MDAC ORBITER (BODY)

•FT8314•

PAGE 29

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

○ - 0.144 0.076 0.228

△ 0.103 0.103

◊ 0.227

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|---------|
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| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

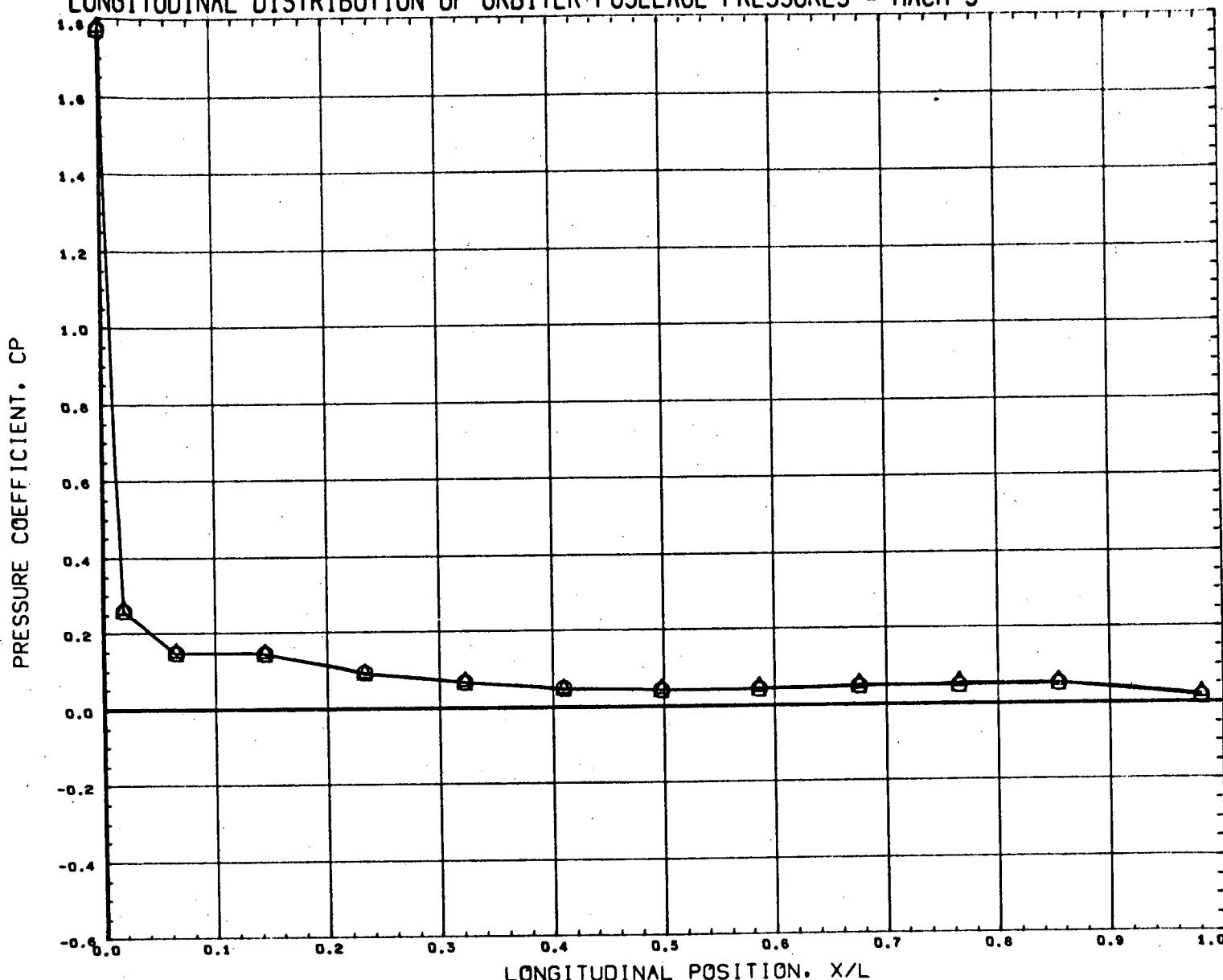
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AEDC VA1163 MDAC ORBITER (BODY)

•FT8314•

PAGE 30

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O - 0.390 0.000 0.908
 A 0.521

PARAMETRIC VALUES
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 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

REFERENCE FILE

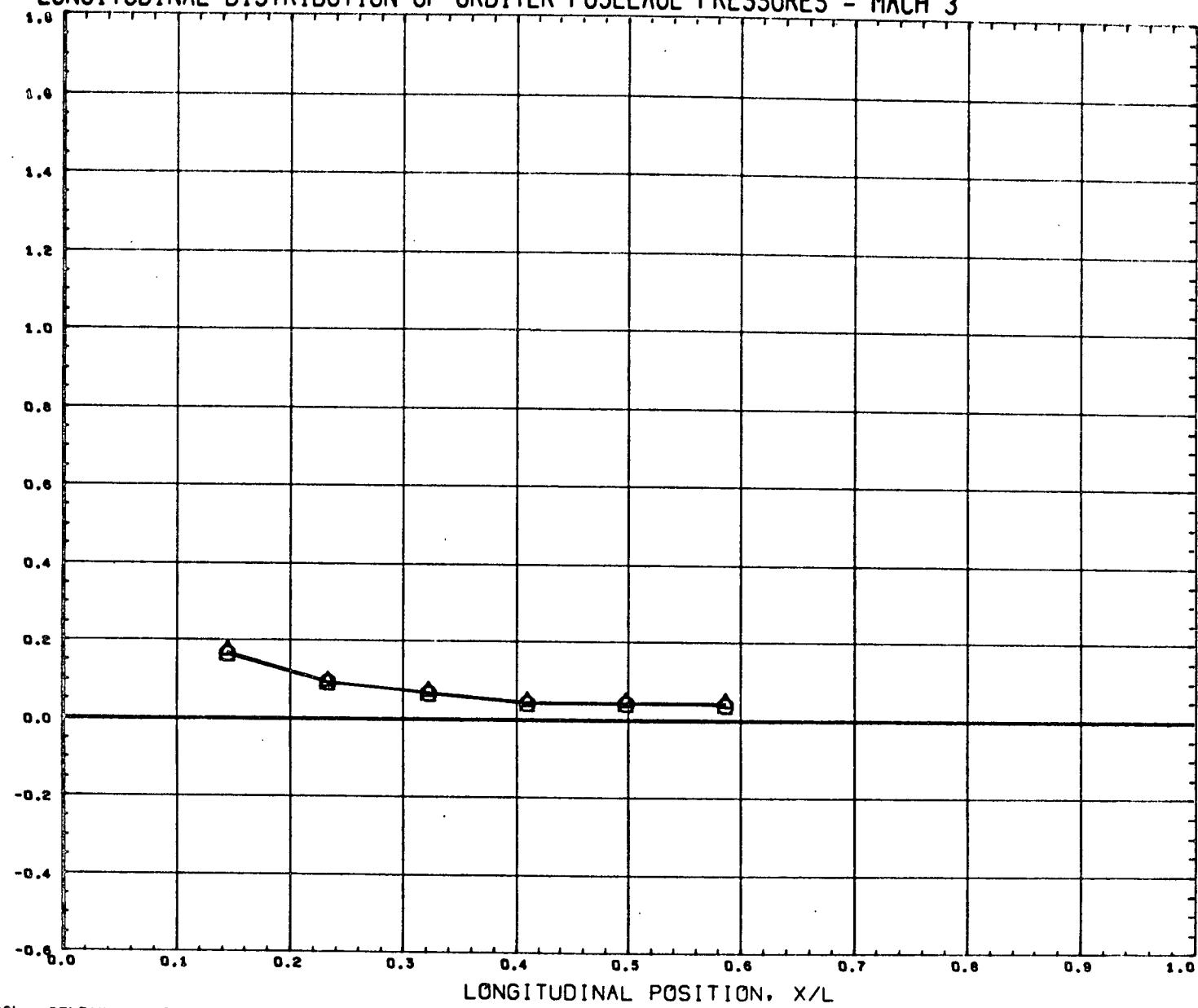
AEDC VA1163 MDAC ORBITER (BODY)

•FT8314•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
 Δ - 0.390 0.076 0.908
 \triangle 0.521

PARAMETRIC VALUES
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 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

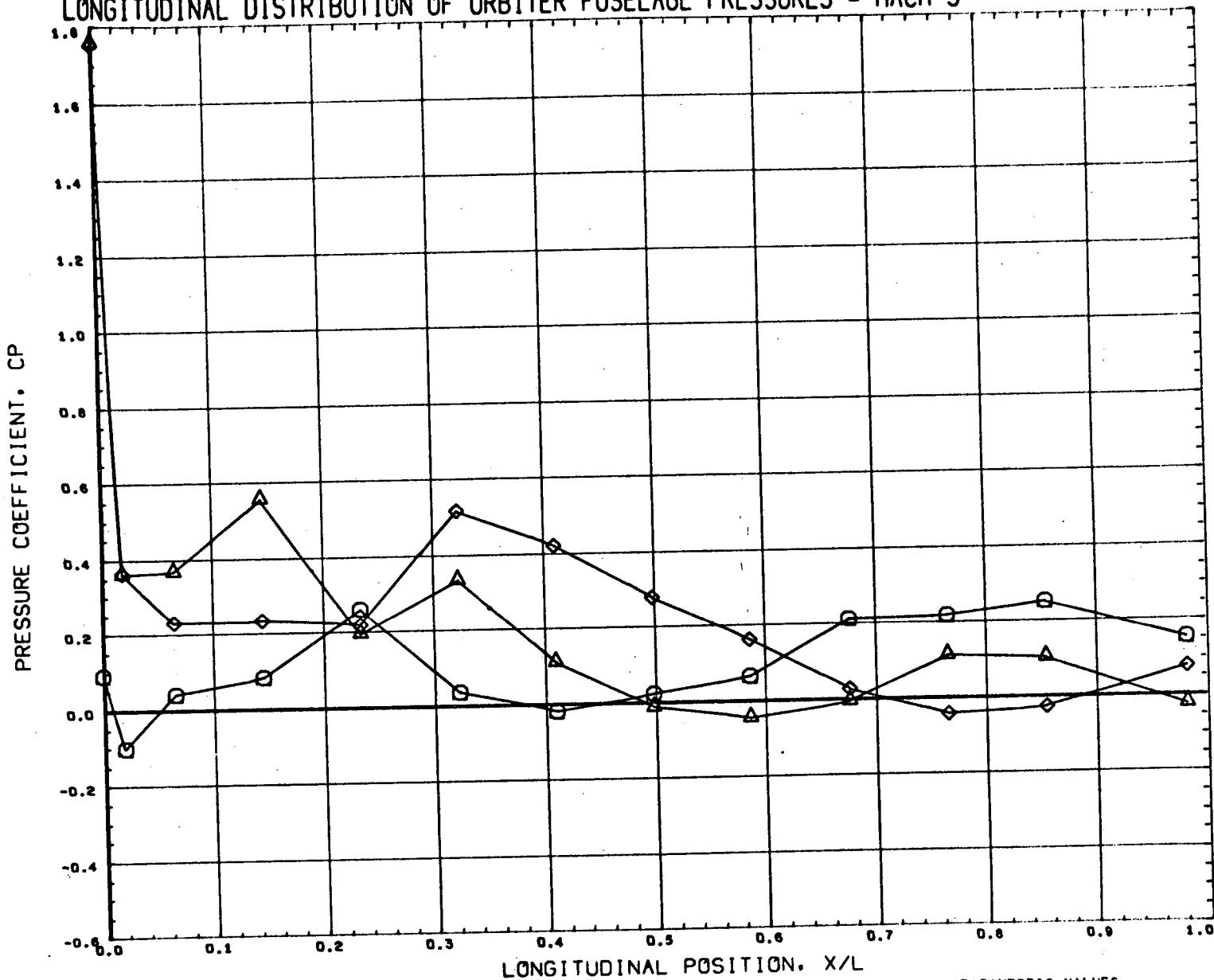
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AEDC VA1163 MDAC ORBITER (BODY)

•FT8314•

PAGE 32

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

△ - 0.143 0.000 0.120

□ 0.103 0.227

◊ 0.227

PARAMETRIC VALUES

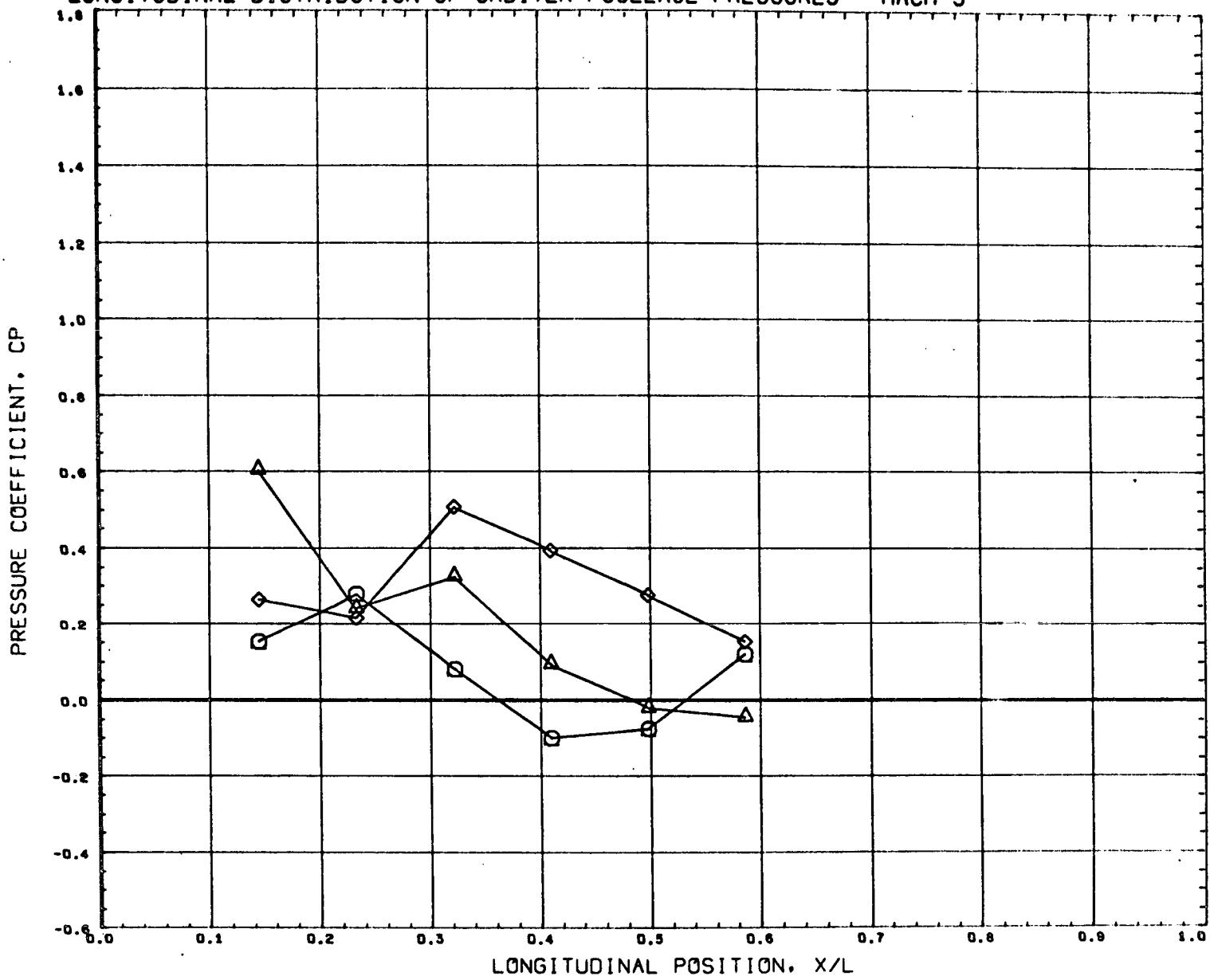
| | | | |
|--------|--------|--------|---------|
| ALPHAB | 10.003 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE
AEDC VA1163 MDAC ORBITER (BODY)

•FT8315•

PAGE 33

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | | |
|---|---|-------|-------|-------|
| ○ | - | 0.143 | 0.076 | 0.120 |
| △ | - | 0.103 | | |
| ◊ | - | 0.227 | | |

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|---------|
| ALPHAB | 10.003 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | .50.000 | | |

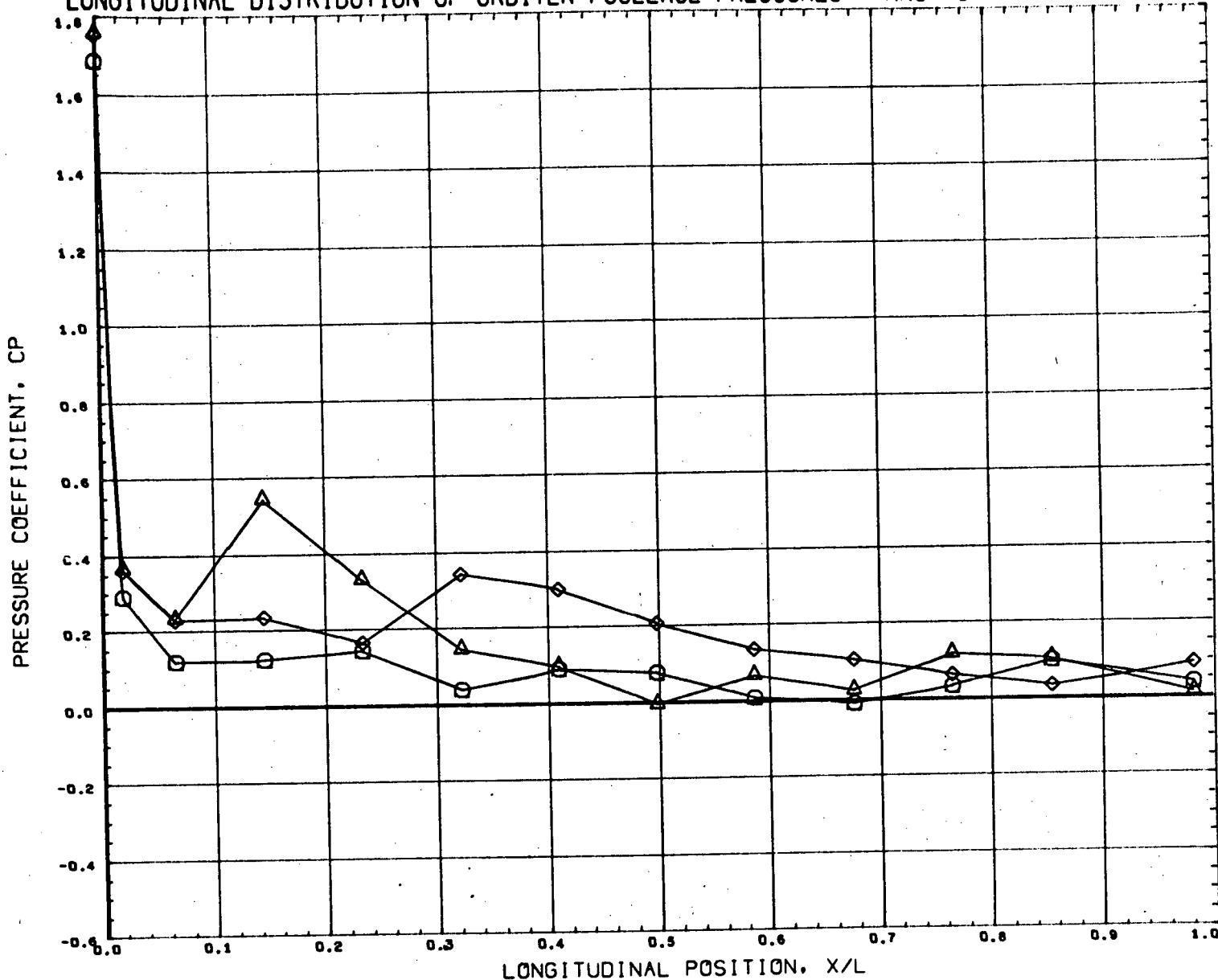
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

•FT8315•

PAGE 34

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 ○ - 0.143 0.000 0.151
 △ - 0.104 0.000 0.151
 ◊ - 0.226 0.000 0.151

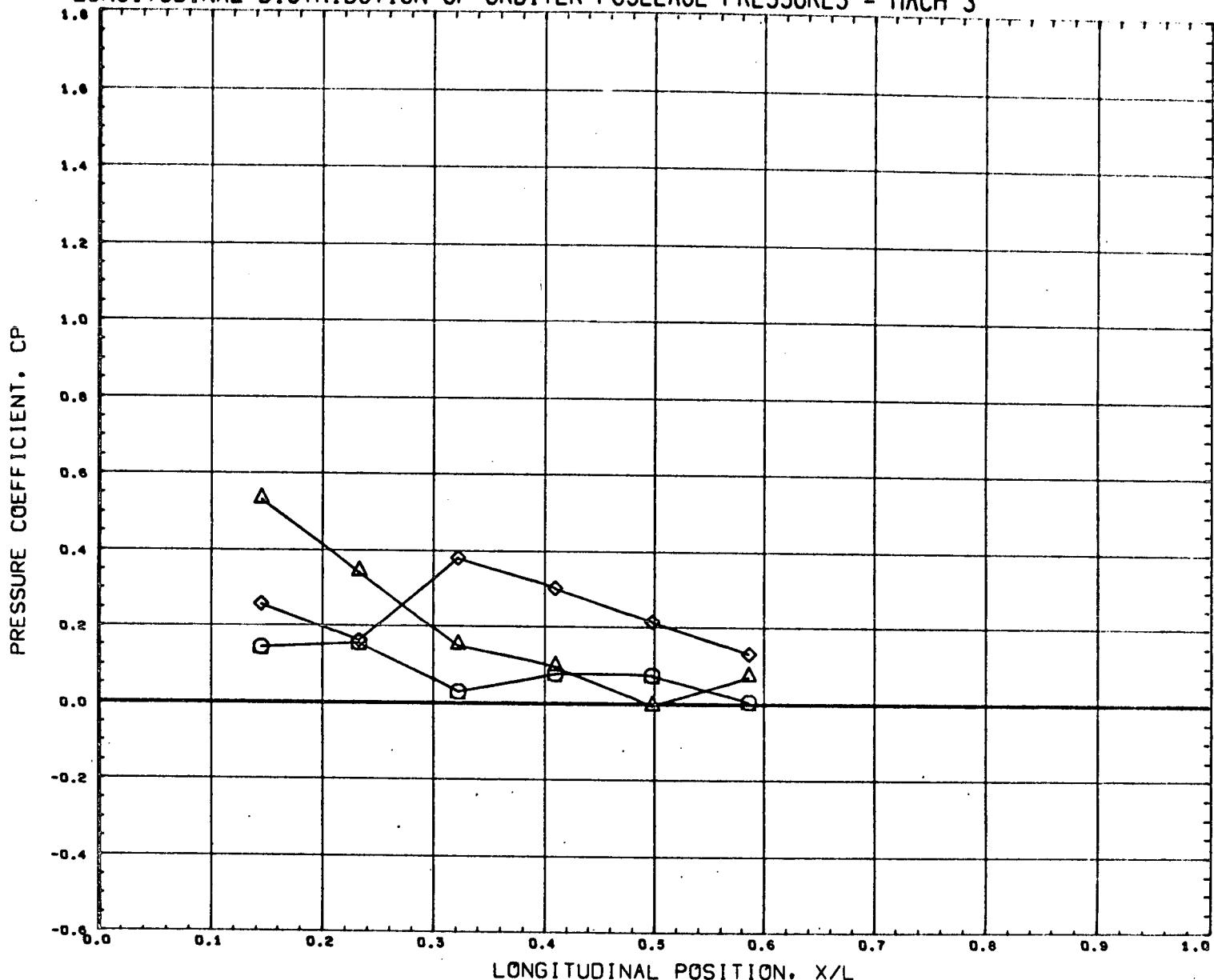
PARAMETRIC VALUES
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 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

REFERENCE FILE
 AEDC VA1163 MDAC ORBITER (BODY)

•FT8315•

PAGE 35

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 ◊ - 0.143 0.076 0.151
 △ 0.104
 ◇ 0.226

PARAMETRIC VALUES
 ALPHAB 10.003 MACH 3.000
 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

REFERENCE FILE

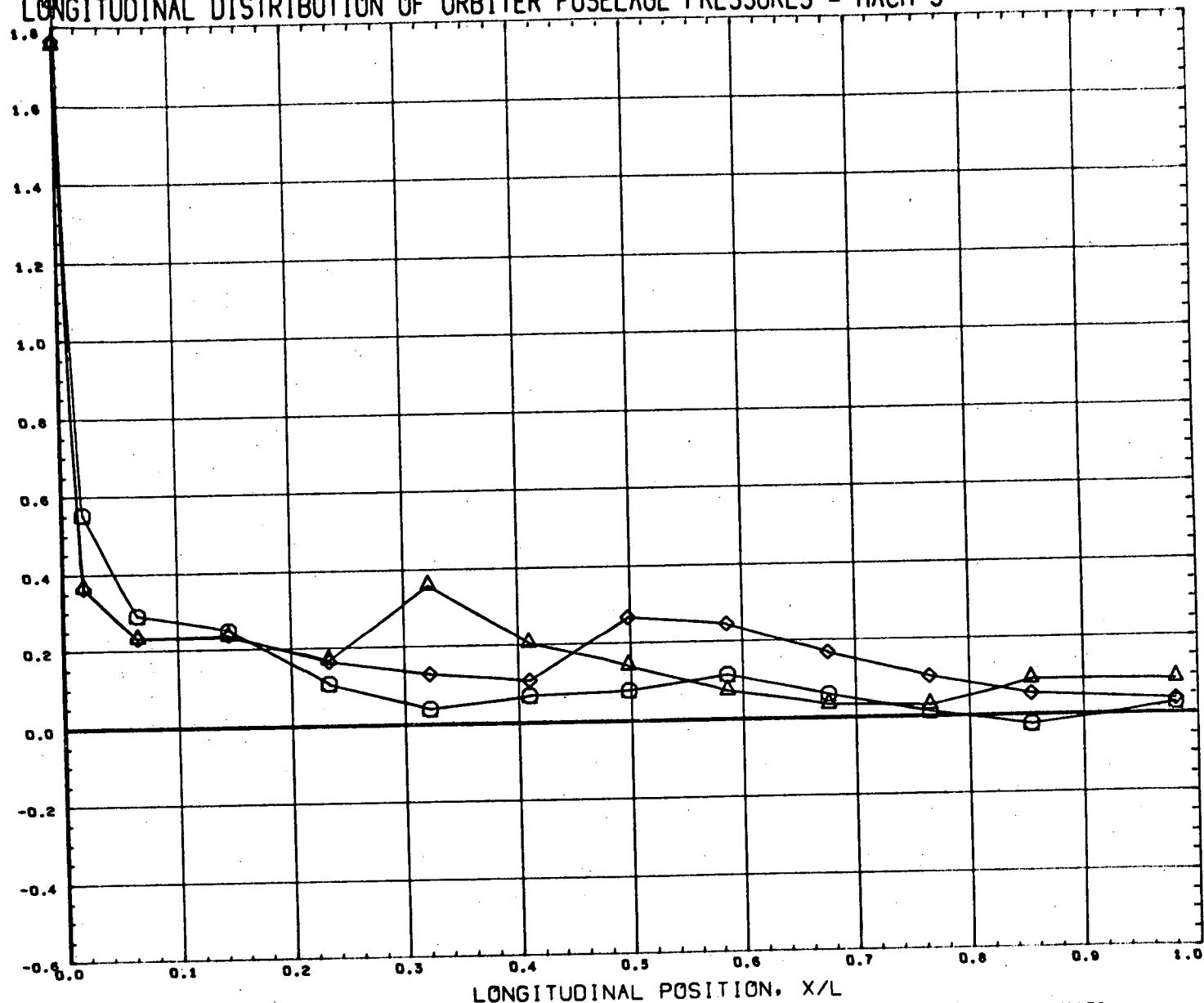
AEDC VA1163 MDAC ORBITER (BODY)

•FT8315•

PAGE 36

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX Y/B DELTAZ
 ○ - 0.143 0.000 0.228
 △ 0.103
 ◇ 0.226

PARAMETRIC VALUES
 ALPHAB 10.003 MACH 3.000
 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

REFERENCE FILE

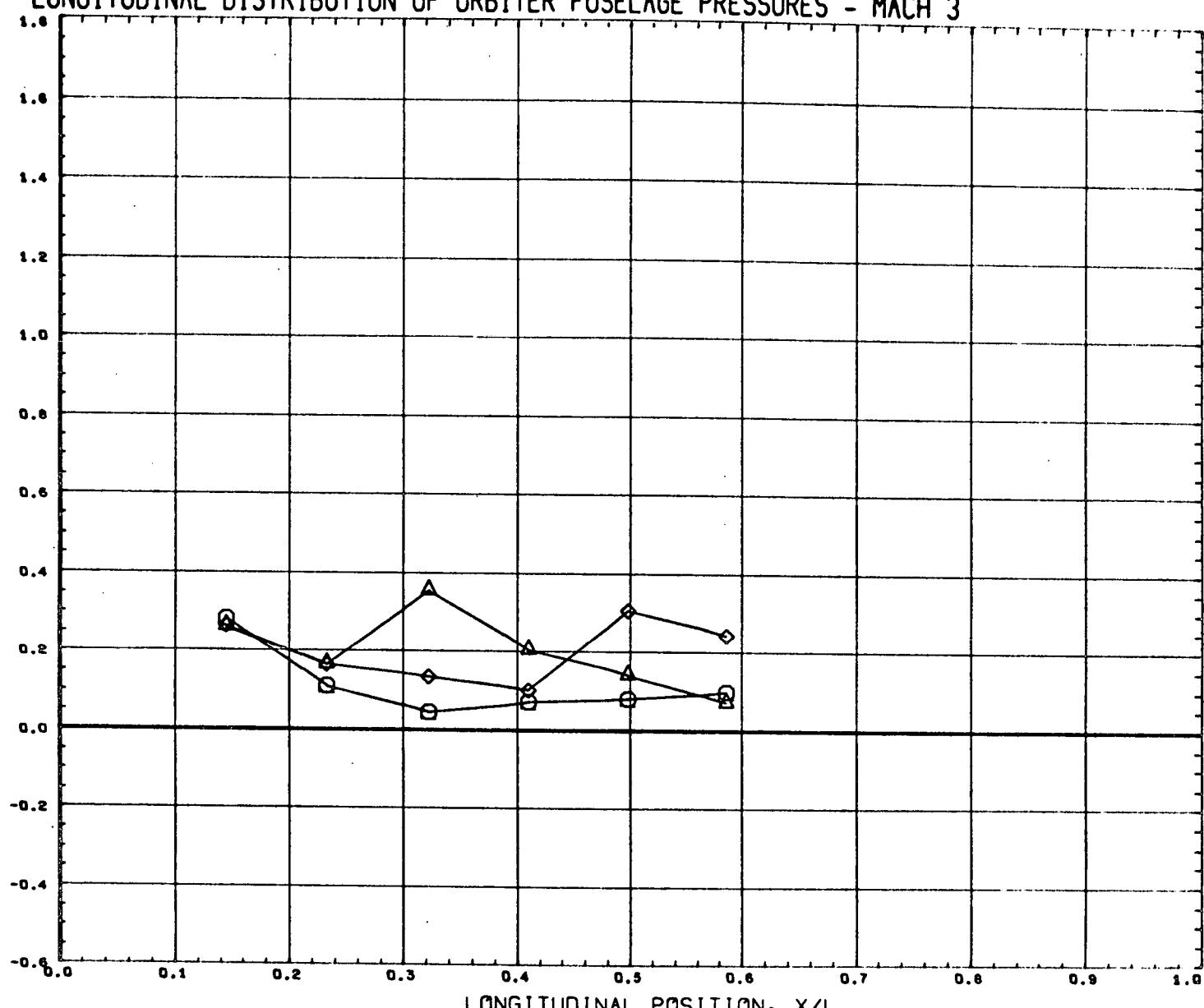
AEDC VA1163 MDAC ORBITER (BODY)

•FT8315•

PAGE 37

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

- \circ - 0.143 0.076 0.228
- \triangle - 0.103 0.226
- \diamond - 0.226

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|---------|
| ALPHAB | 10.003 | MACH | 3.000 |
| ALPHAT | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

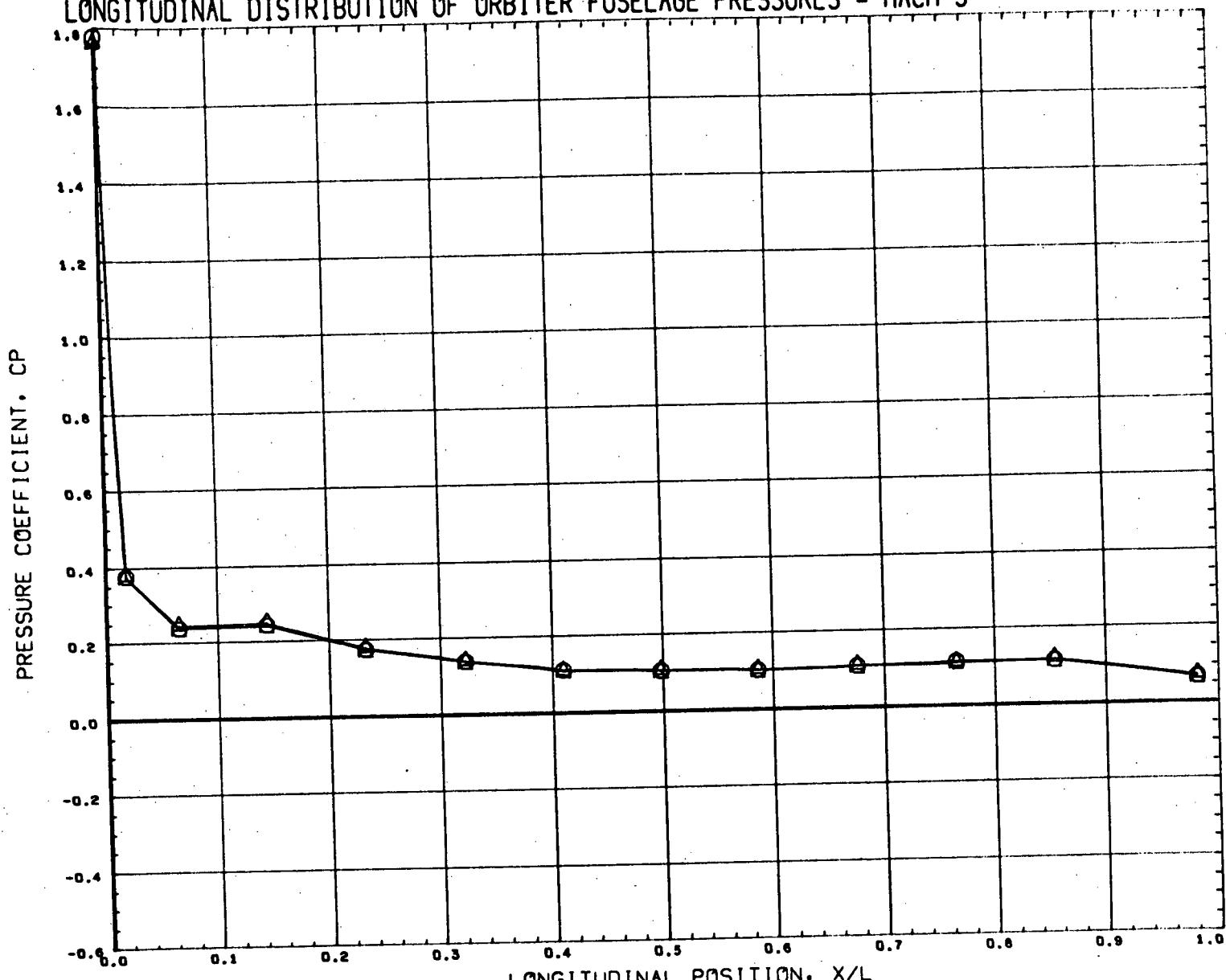
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

•FT8315•

PAGE 38

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O - 0.391 0.000 0.908
 △ - 0.518

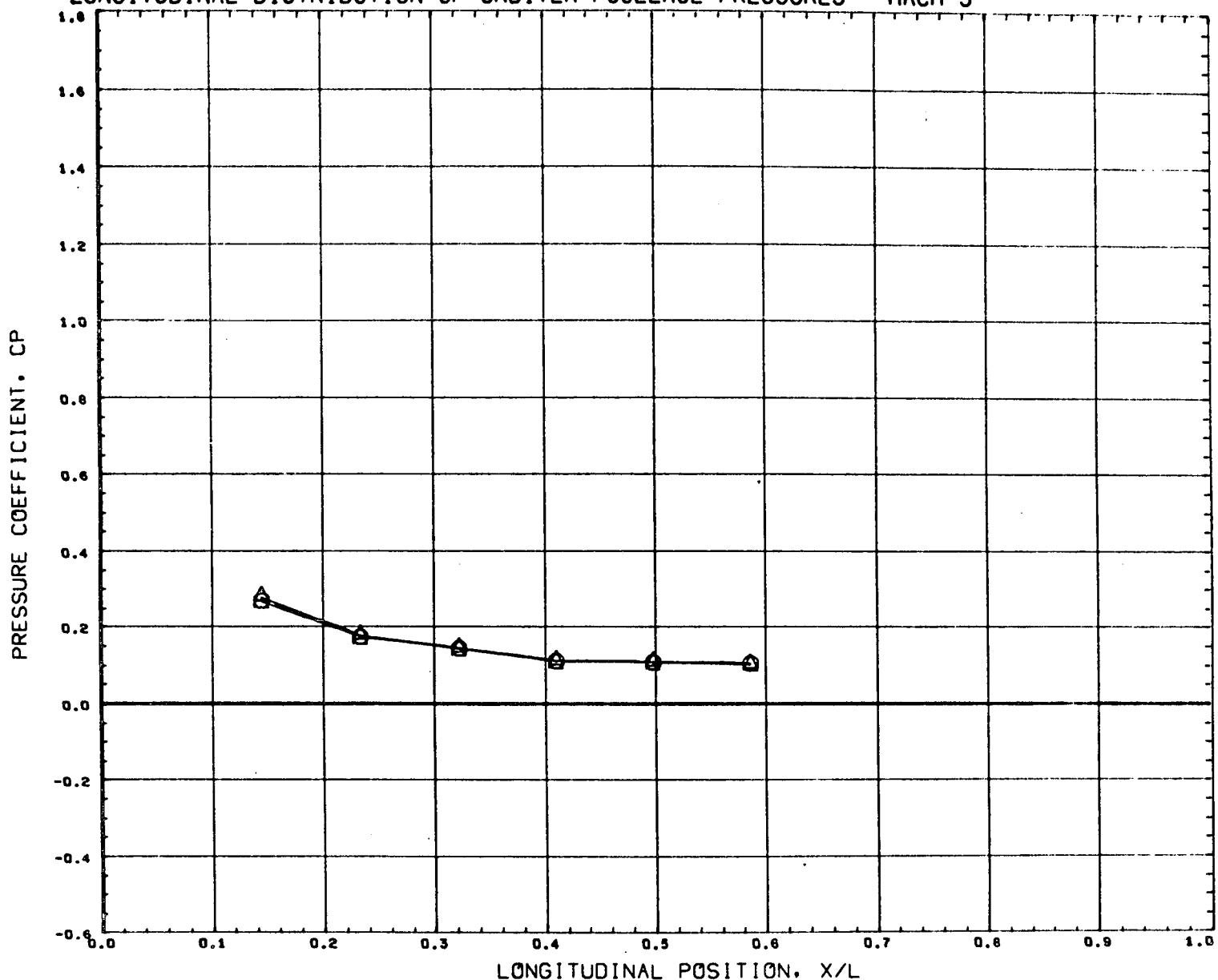
PARAMETRIC VALUES
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 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

REFERENCE FILE
 AEDC VA1163 MDAC ORBITER (BODY)

•FT8315•

PAGE 39

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O - 0.391 0.076 0.908
 △ 0.518

PARAMETRIC VALUES
 ALPHAB 10.003 MACH 3.000
 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

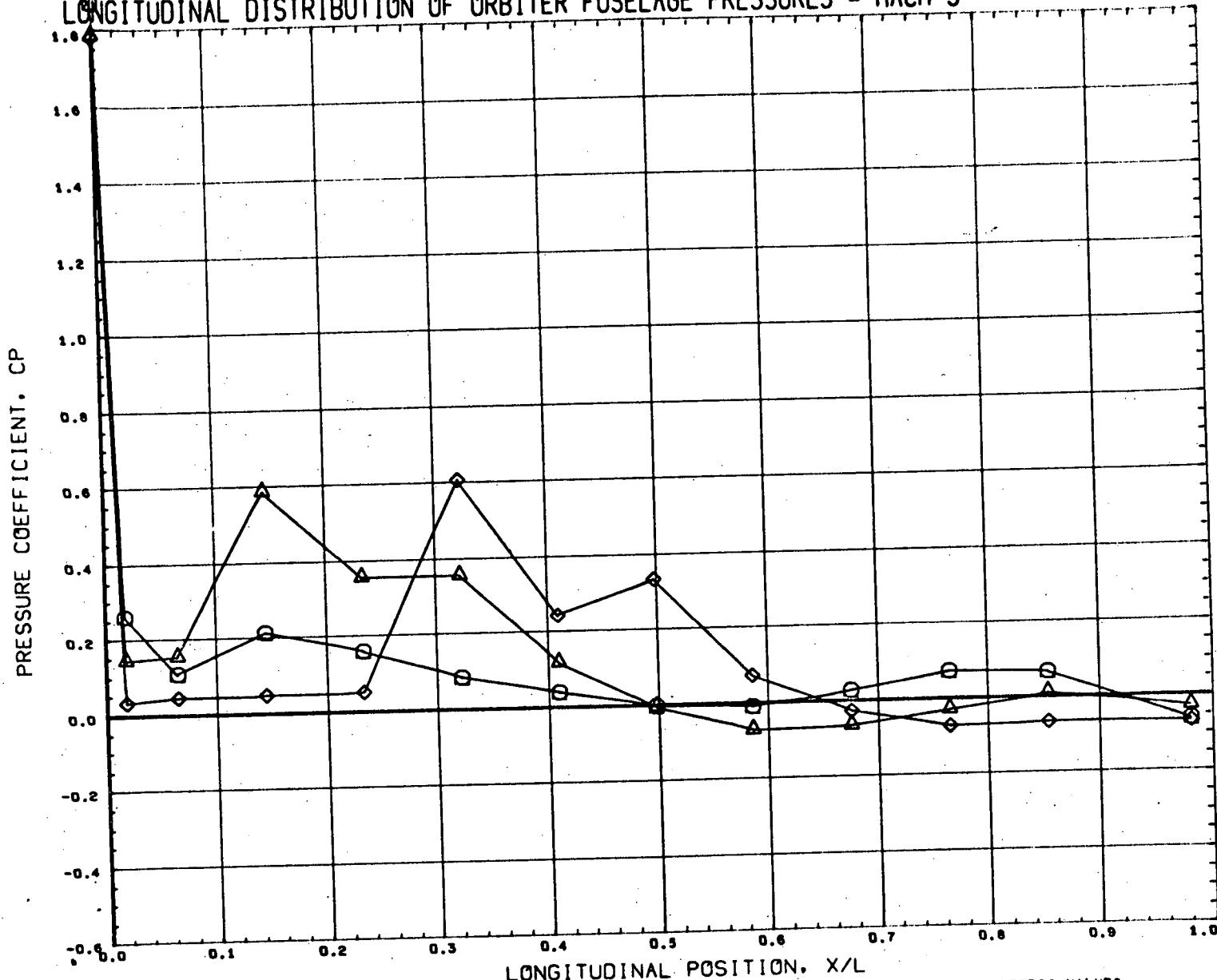
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

•FT8315•

PAGE 40

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 - 0.143 0.000 0.120
 △ 0.103
 ◇ 0.227

PARAMETRIC VALUES
 ALPHAB - 9.977 MACH 3.000
 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

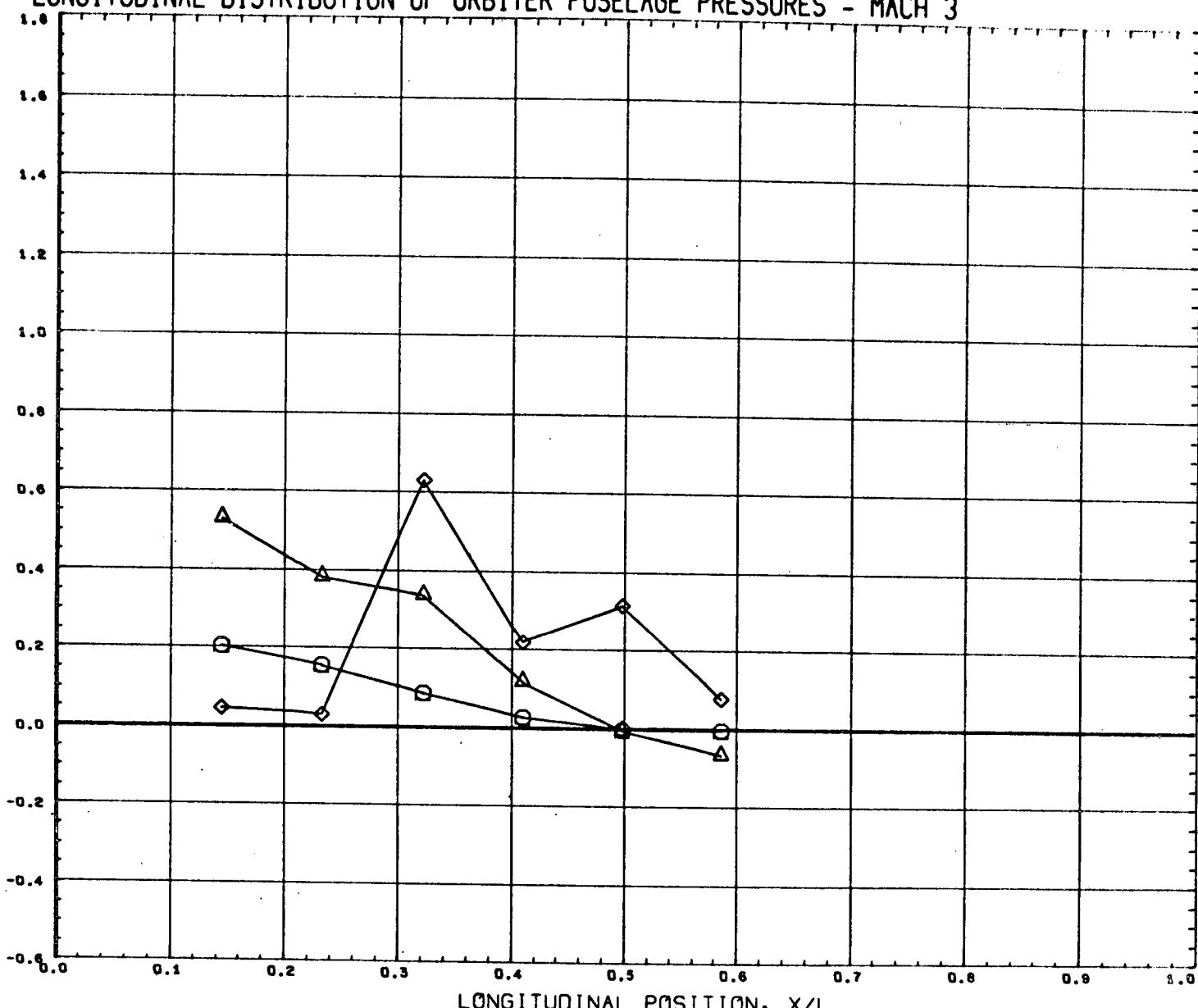
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 AEDC VA1163 MDAC ORBITER (BODY)

•FT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

▲ 0.143
 0.103
 0.227

REFERENCE FILE

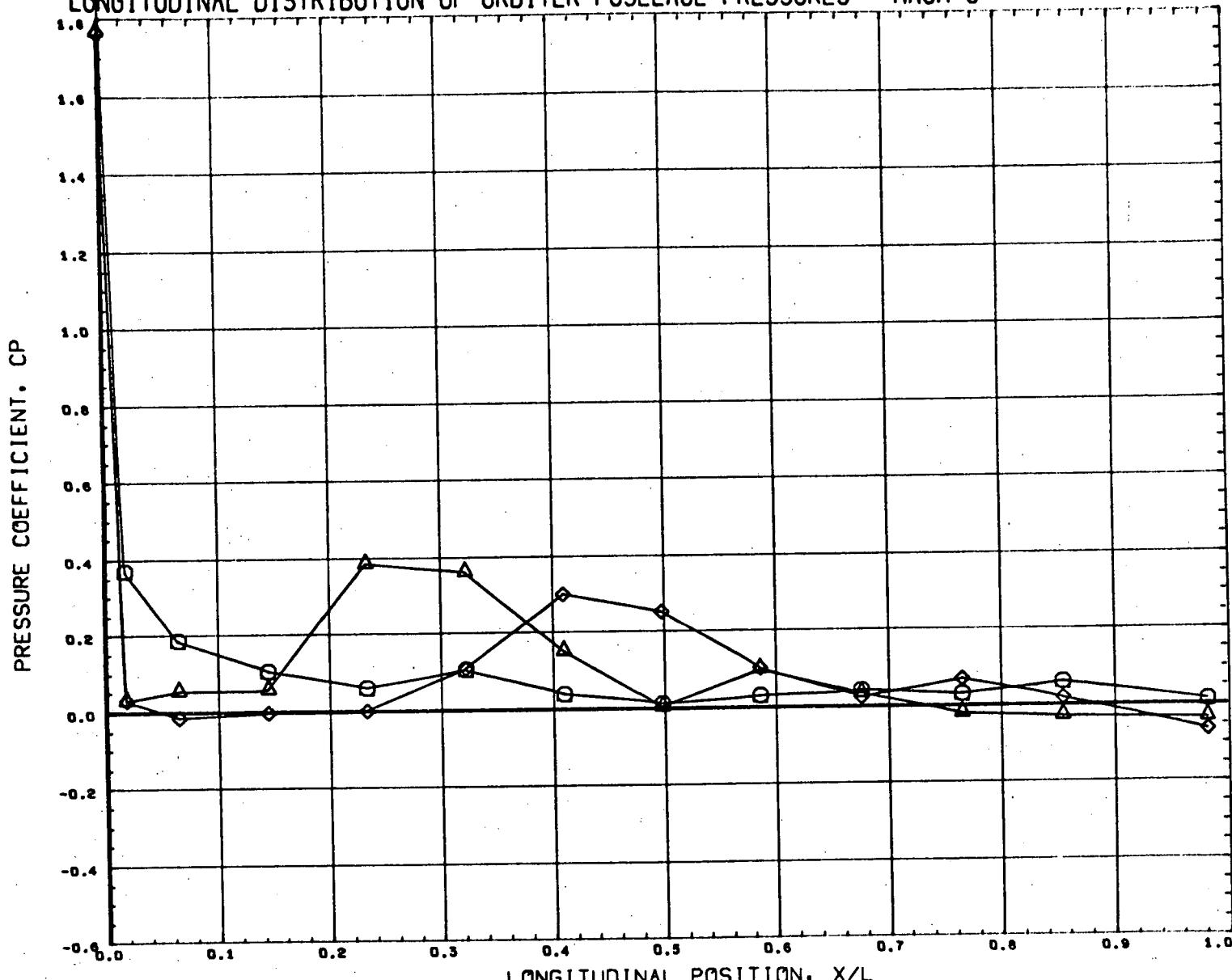
AEDC VA1163 MDAC ORBITER (BODY)

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | = 9.977 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

•FT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 □ - 0.144 0.000 0.151
 △ 0.103
 ◇ 0.227

PARAMETRIC VALUES
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 BSTPOW = 0.000

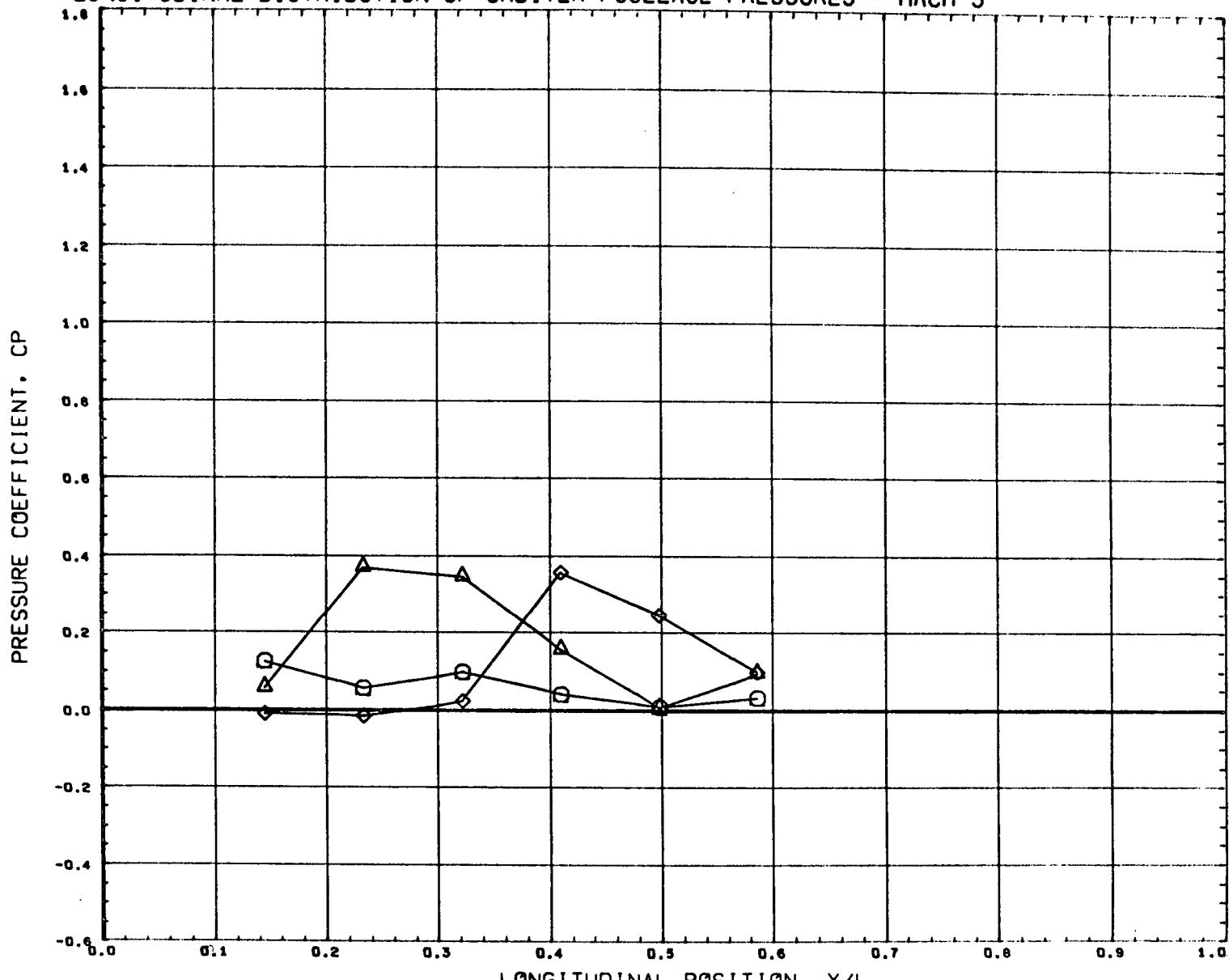
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AEDC VAI163 MDAC ORBITER (BODY)

•FT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 ◇ - 0.144 0.076 0.151
 △ 0.103
 ◊ 0.227

PARAMETRIC VALUES
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 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

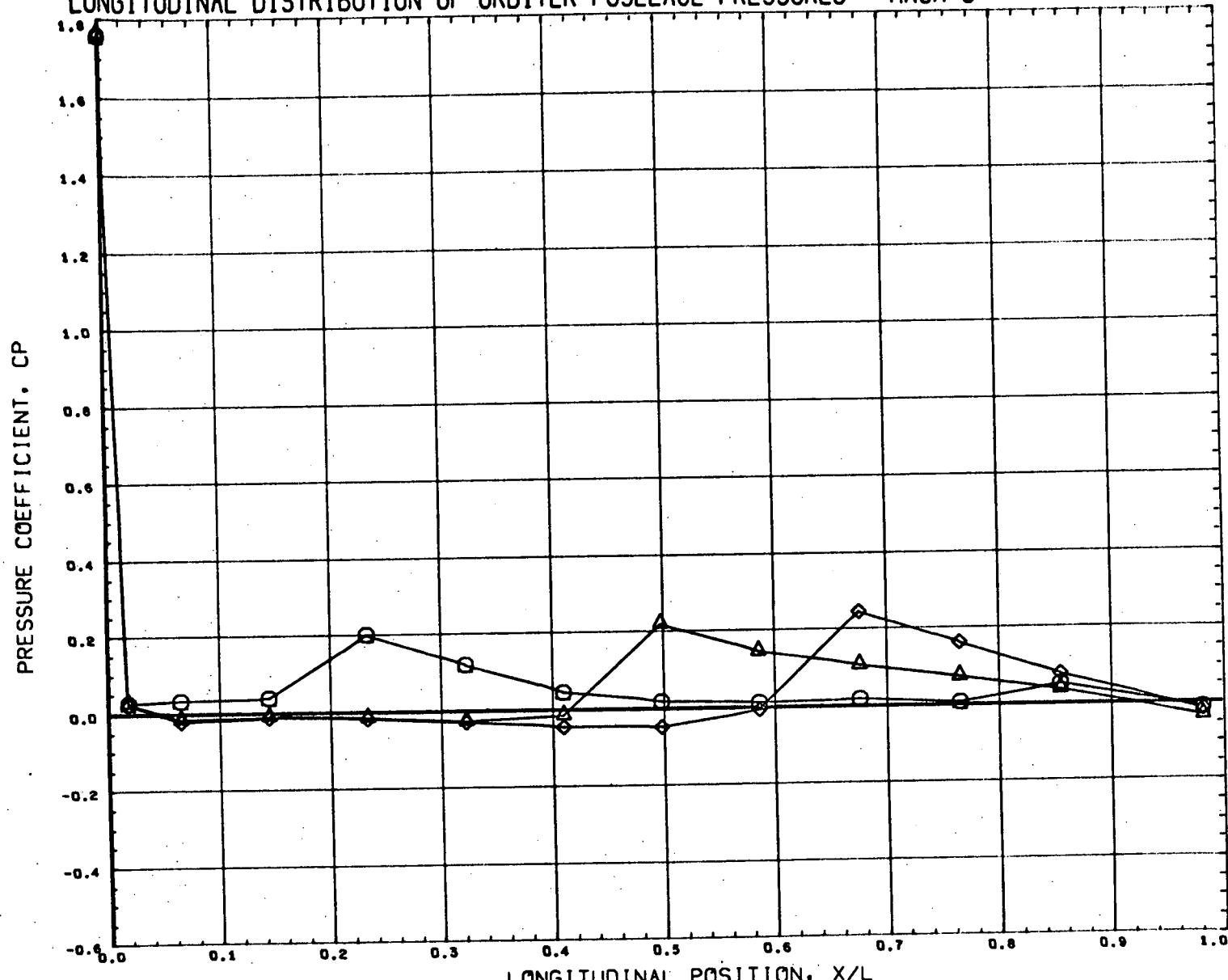
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

•FT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 ○ - 0.143 0.000 0.228
 △ 0.103 0.000 0.000
 ◇ 0.226 0.000 0.000

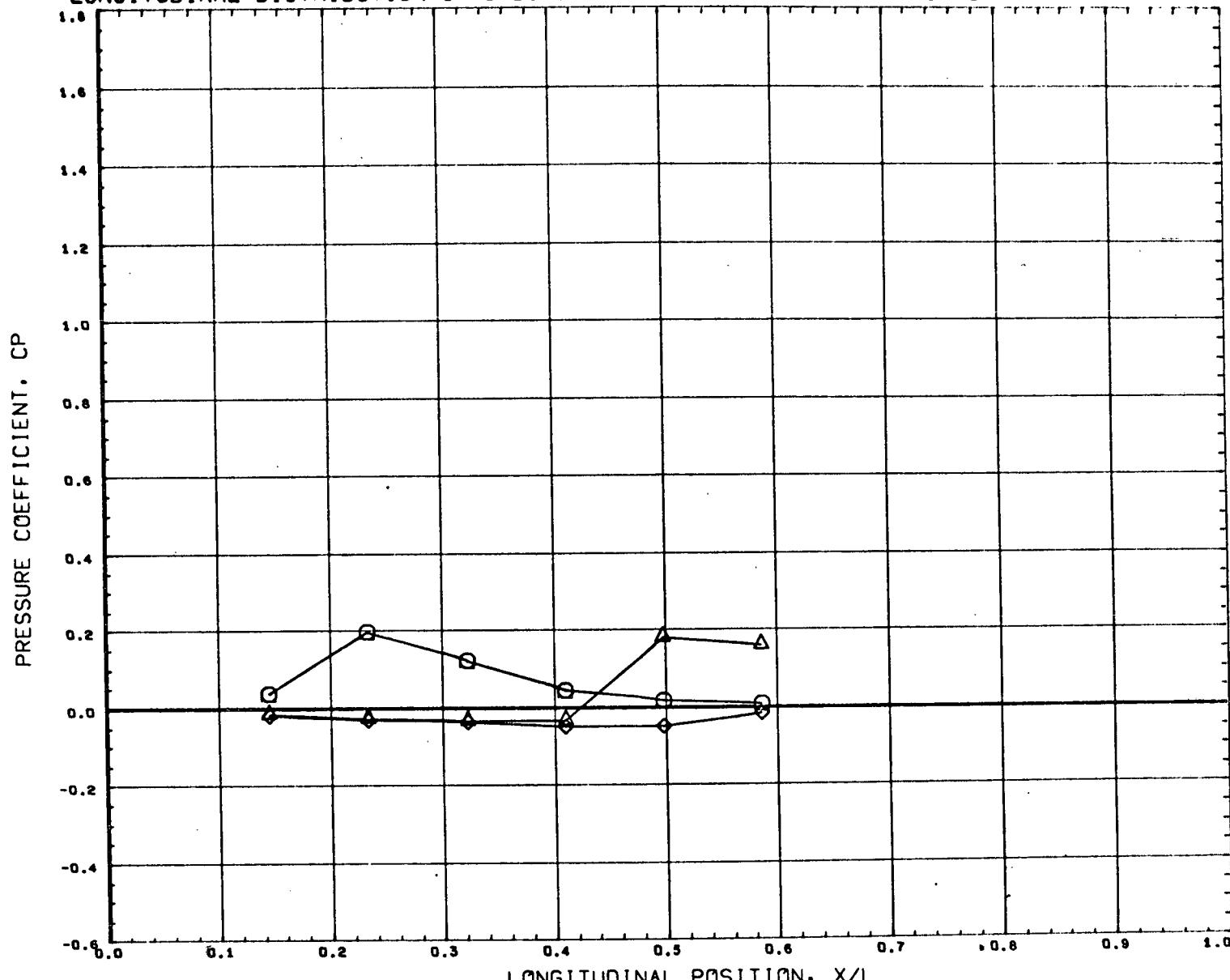
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REFERENCE FILE
 AEDC VA1163 MDAC ORBITER (BODY)

•FT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 0.076 | 0.228 |
| △ | - 0.103 | | |
| ◊ | - 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|-------|
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| BSTPOW | 0.000 | | |

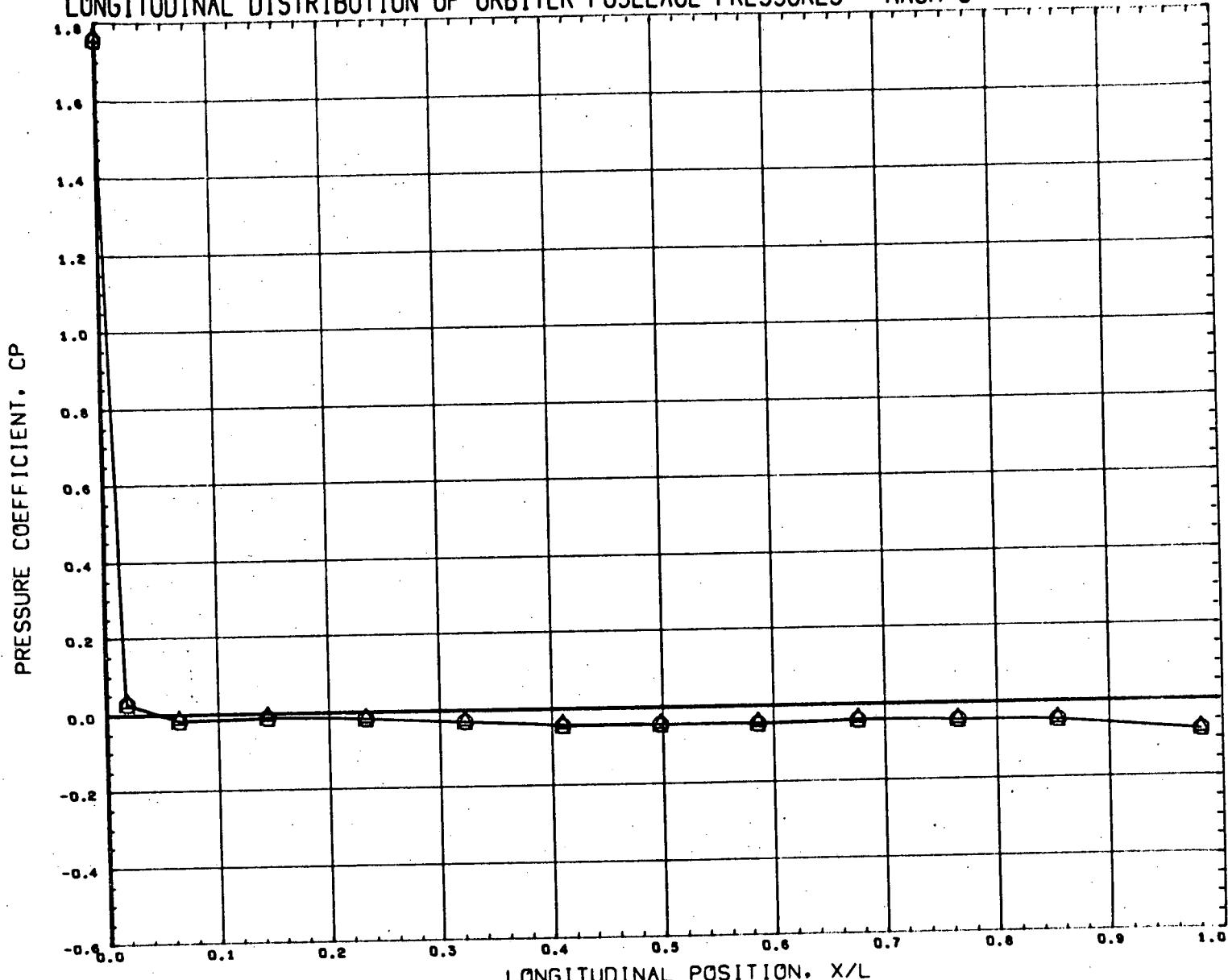
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O - 0.391 0.000 0.908
 A 0.516

PARAMETRIC VALUES
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 ALPHA1 = 0.000 ORBPOW 0.000
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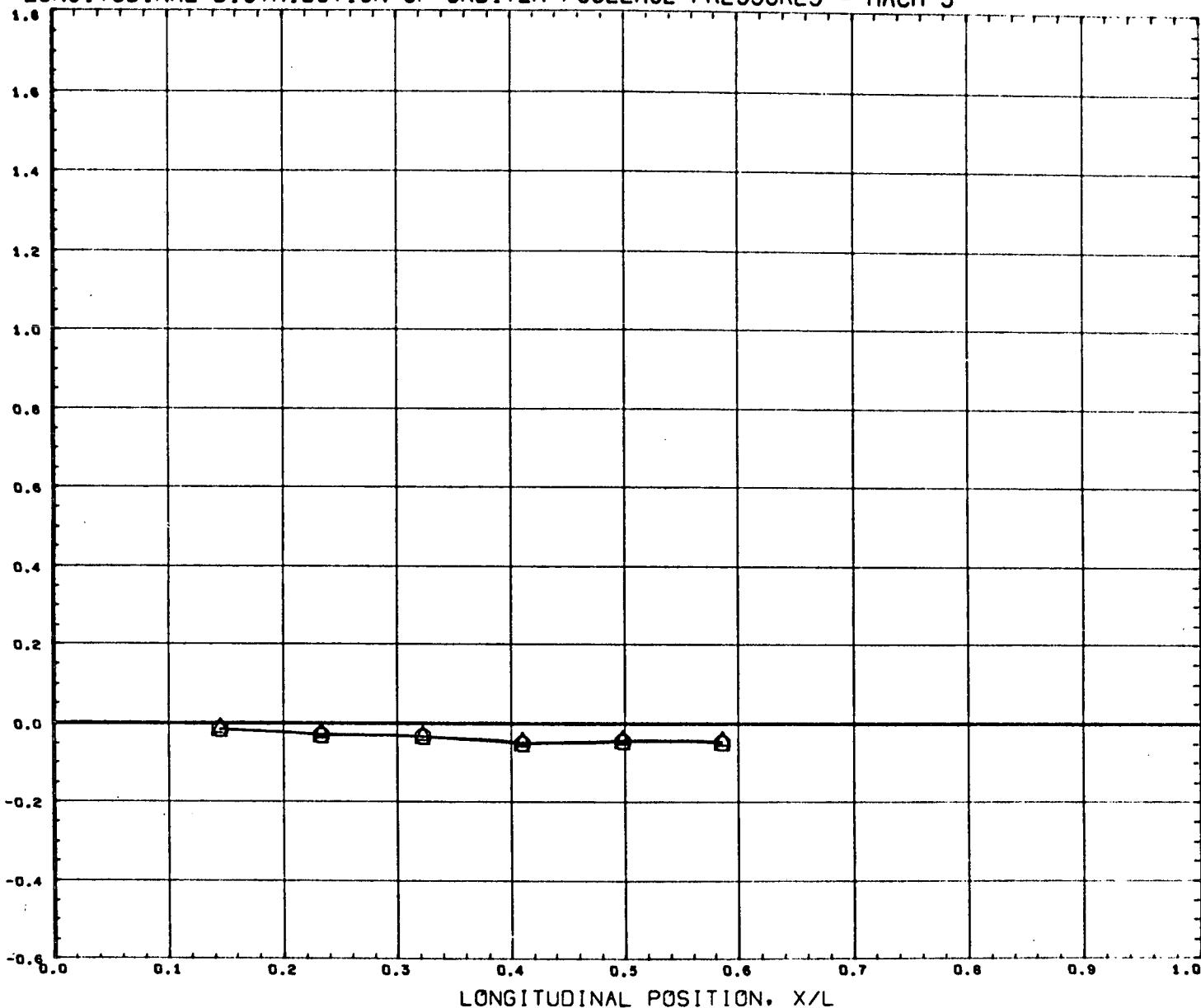
REFERENCE FILE
 AEDC VA1163 MDAC ORBITER (BODY)

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/Z DELTAZ
○ - 0.391 0.076 0.908
△ - 0.516

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

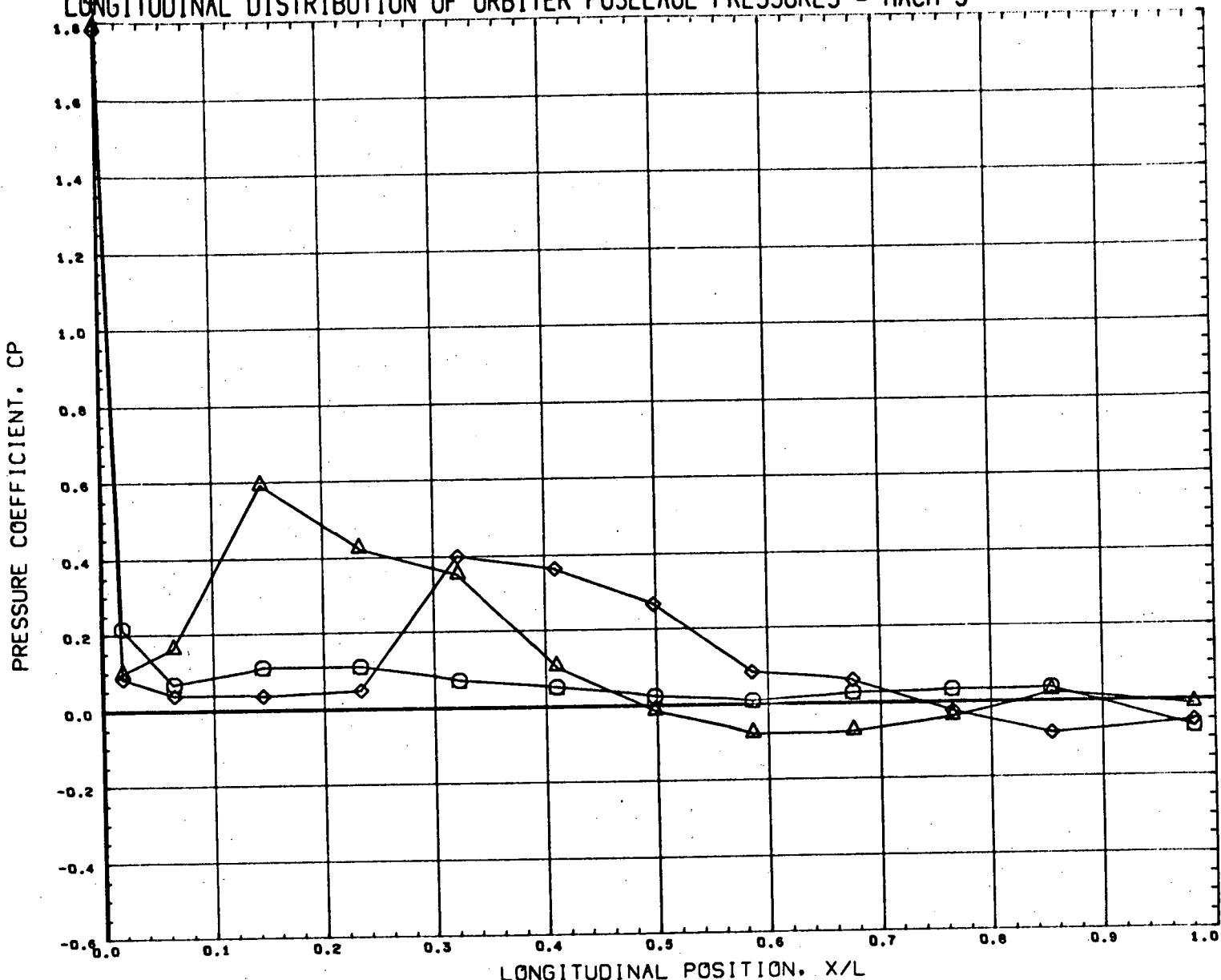
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AEDC VA1163 MDAC ORBITER (BODY)

•FT8321•

PAGE 48

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
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| △ | 0.103 | | |
| ◊ | 0.226 | | |

PARAMETRIC VALUES

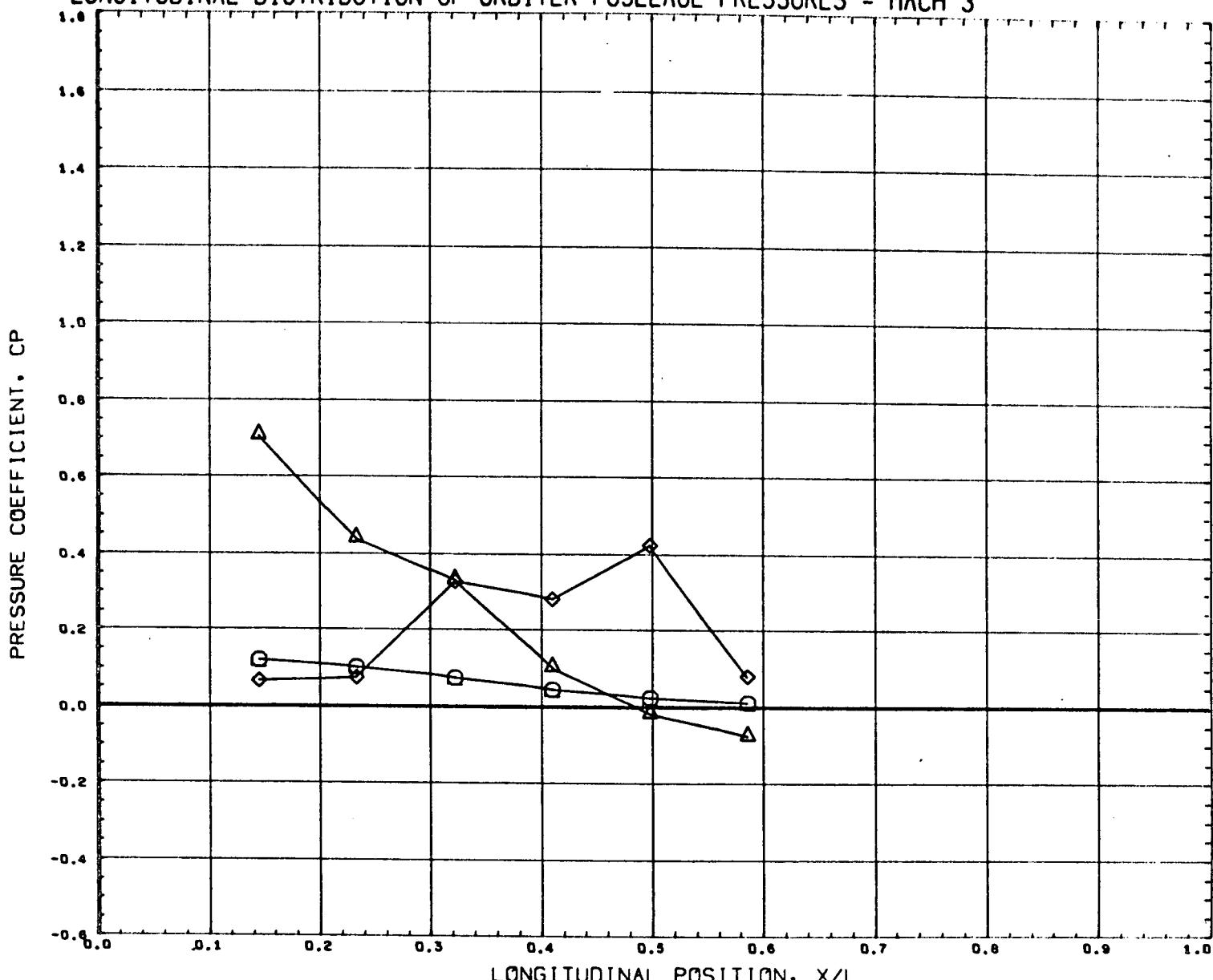
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE
AEDC VA1163 MDAC ORBITER (BODY)

•FT8322•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 0.076 | 0.120 |
| △ | - 0.103 | | |
| ◇ | - 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

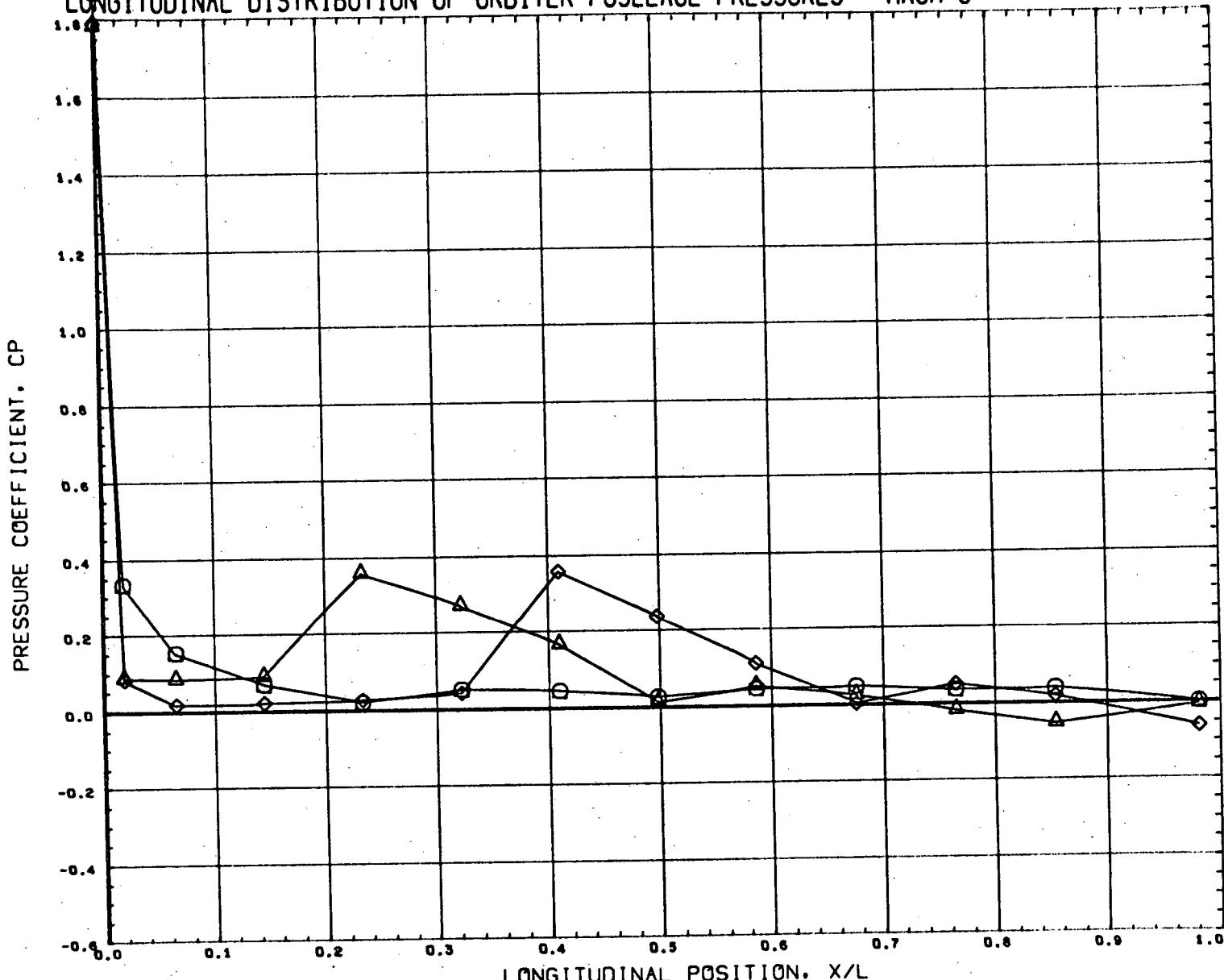
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

•FT8322•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.144 | 0.000 | 0.151 |
| △ | 0.101 | | |
| ◊ | 0.226 | | |

PARAMETRIC VALUES

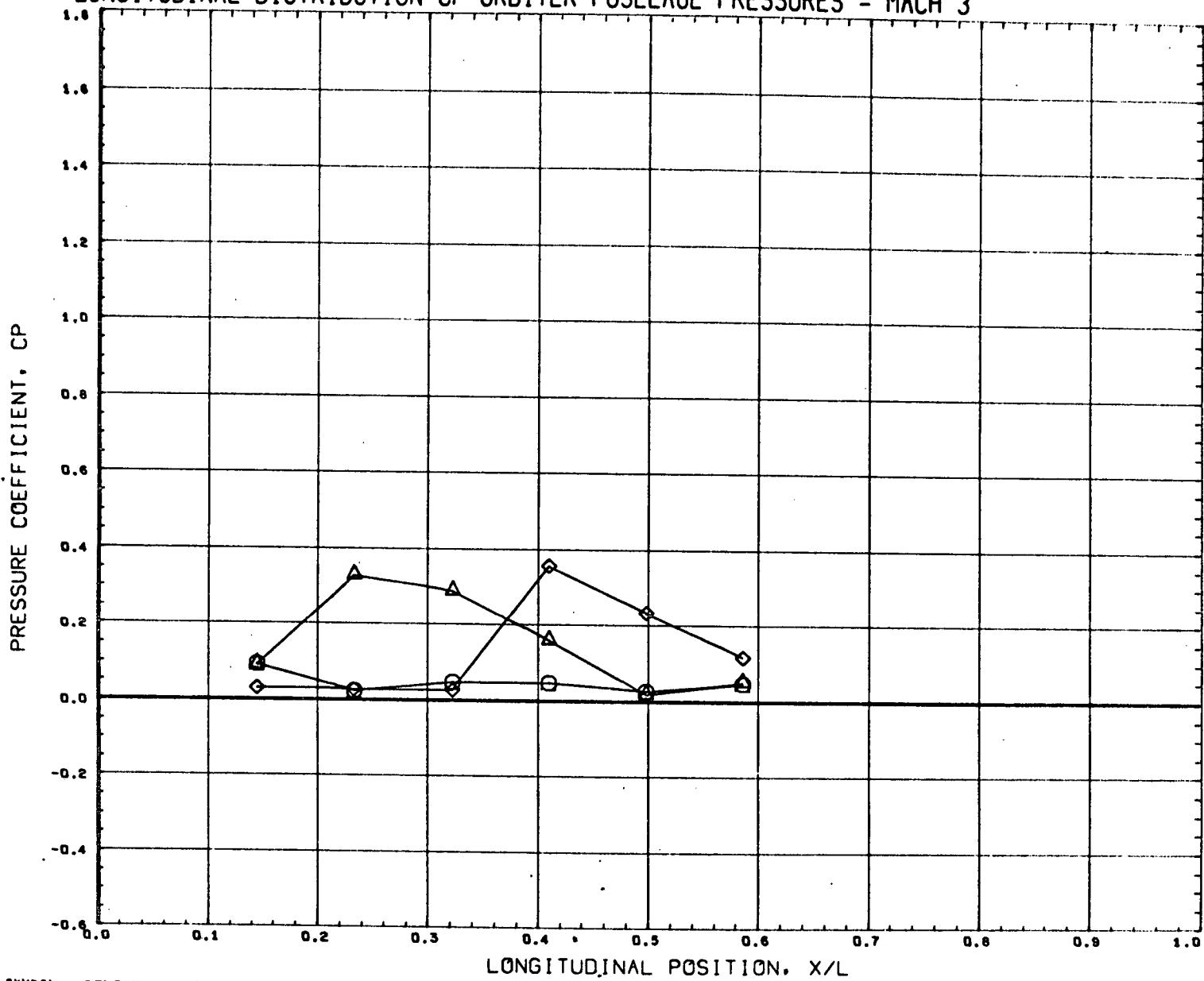
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|--------|---------|--------|-------|
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| ALPHAT | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE
AEDC VA1163 MDAC ORBITER (BODY)

•FT8322•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.144 | 0.076 | 0.151 |
| △ | 0.101 | | |
| ◊ | 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

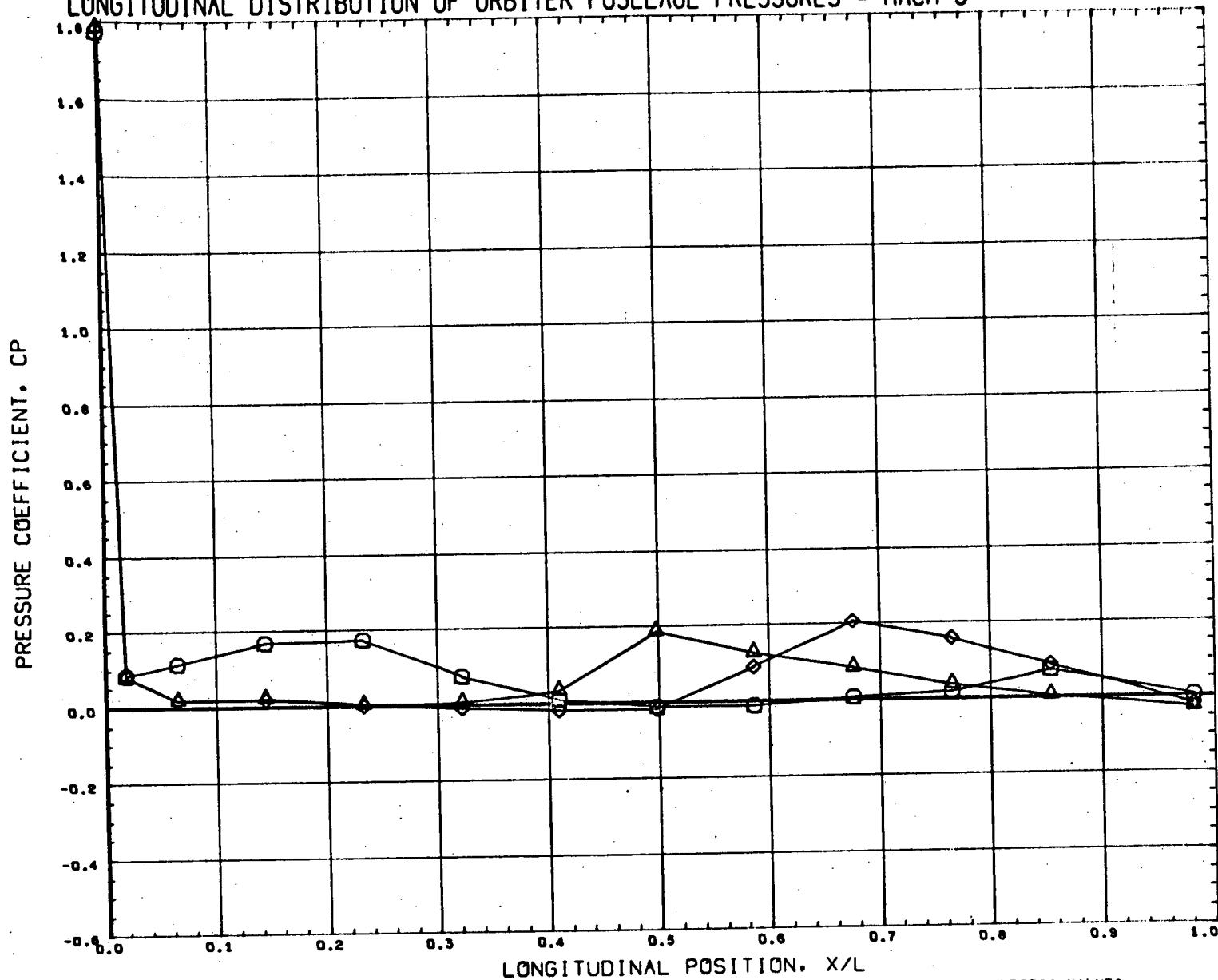
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O - 0.143 0.000 0.228
 △ - 0.104 0.000 0.000
 ◇ - 0.227 0.000 0.000

PARAMETRIC VALUES
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 BSTPOW = 0.000

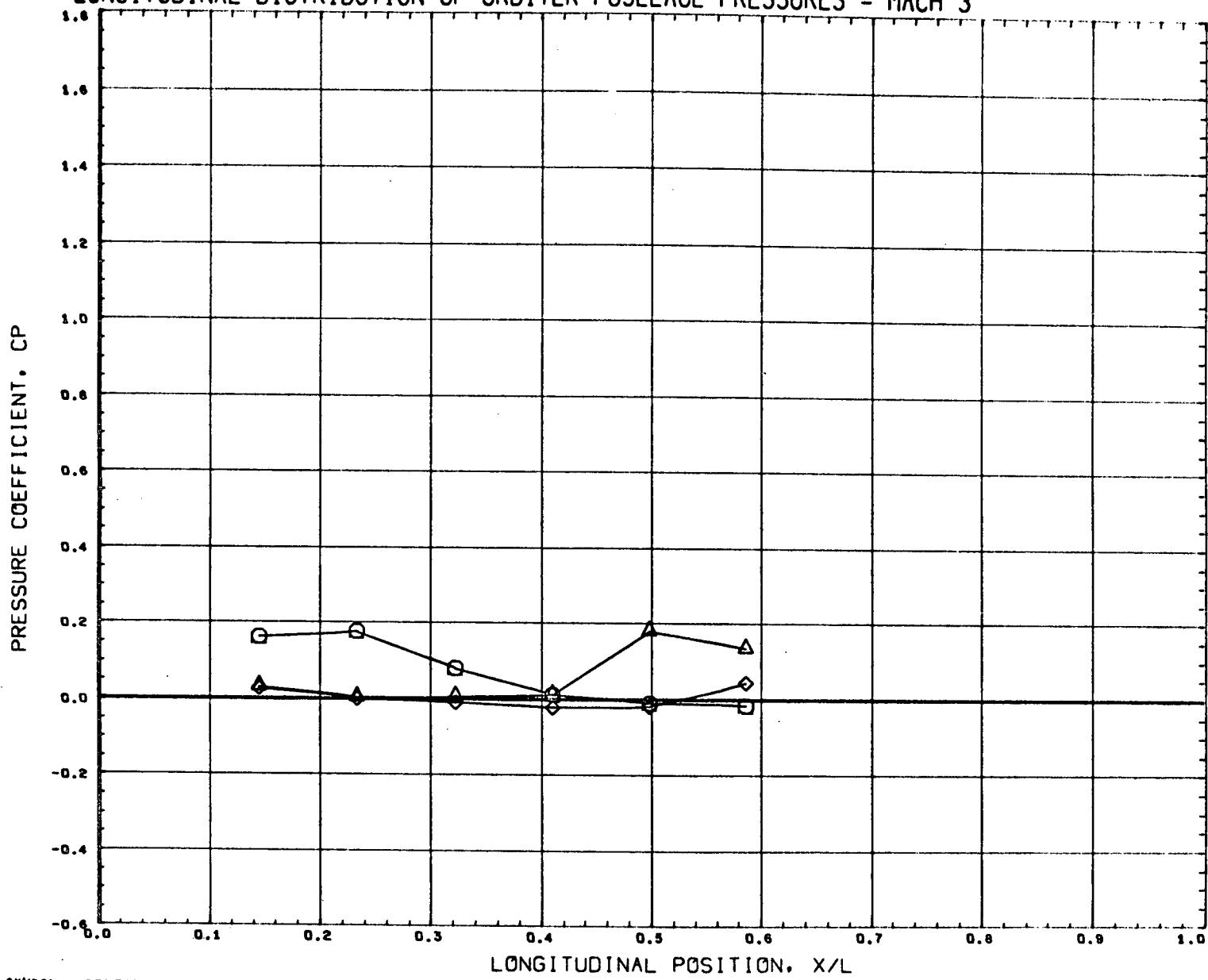
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

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PAGE 53

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 0.076 | 0.228 |
| △ | 0.104 | | |
| ◊ | 0.227 | | |

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

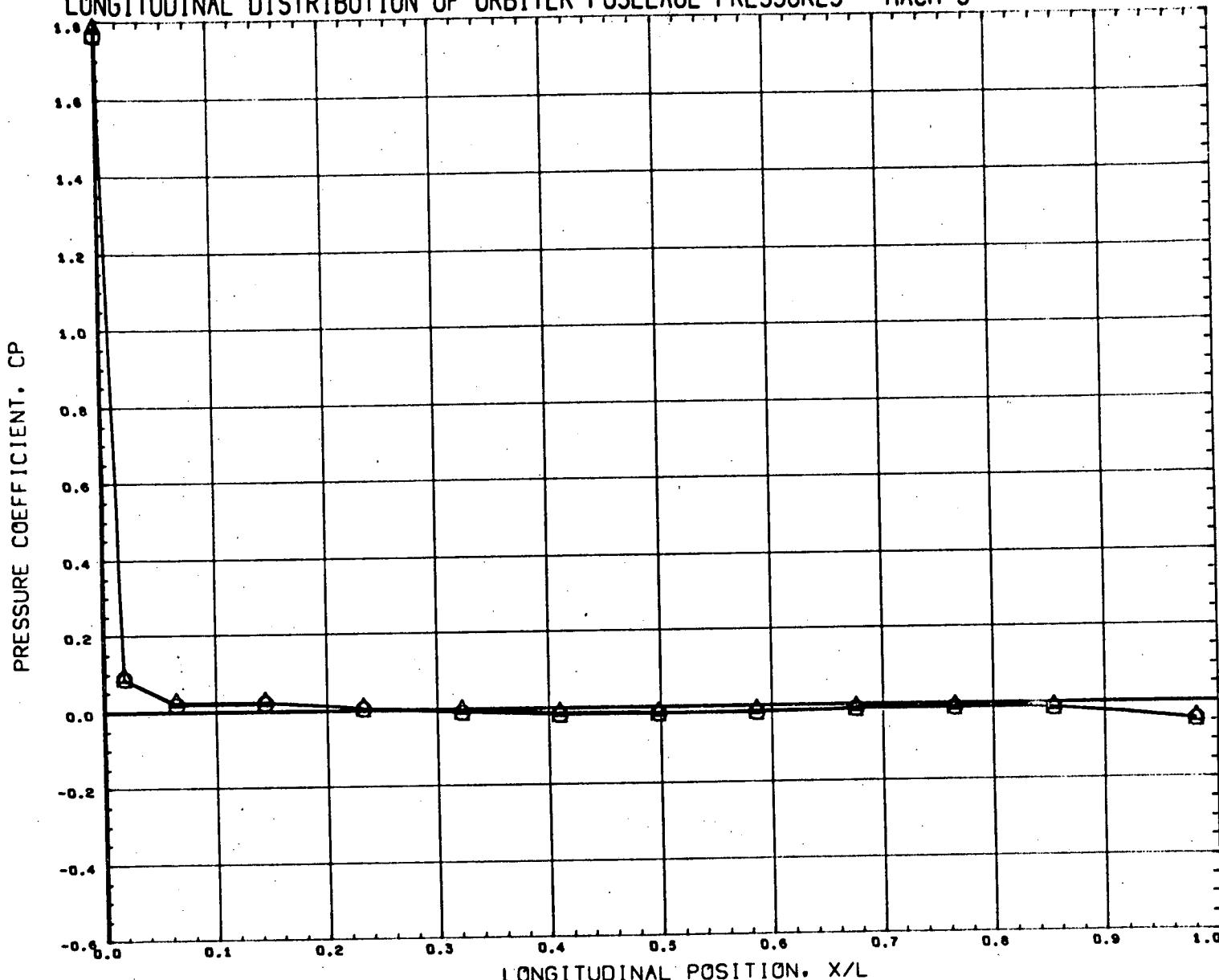
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AEDC VA1163 MDAC ORBITER (BODY)

•FT8322•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O - 0.391 0.000 0.908
 △ 0.516

PARAMETRIC VALUES
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 ALPHAI = 0.000 ORBPOW = 0.000
 BSTPOW = 0.000

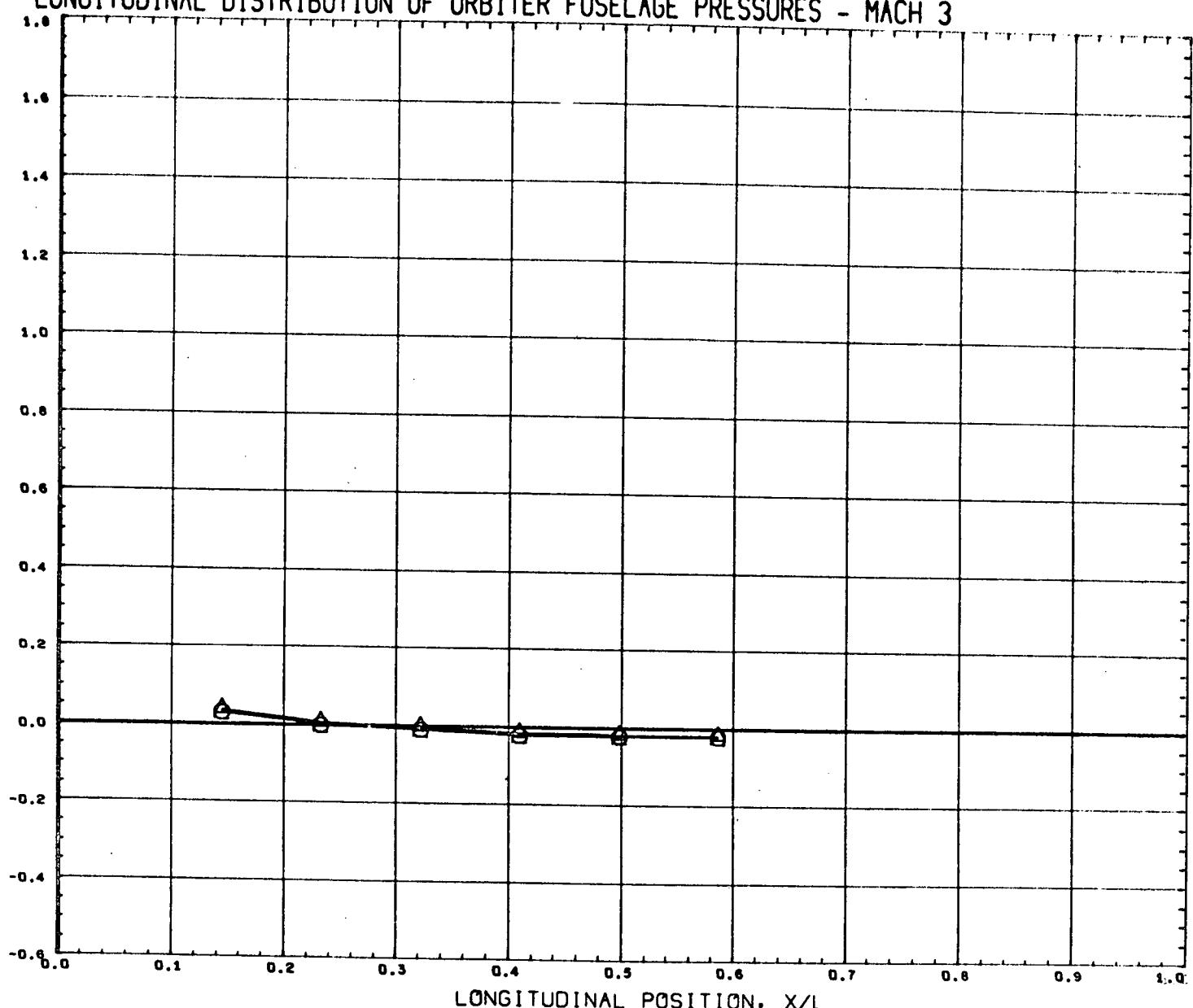
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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
 O - 0.391 0.076 0.908
 △ 0.516

PARAMETRIC VALUES
 ALPHAB - 4.939 MACH 3.000
 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

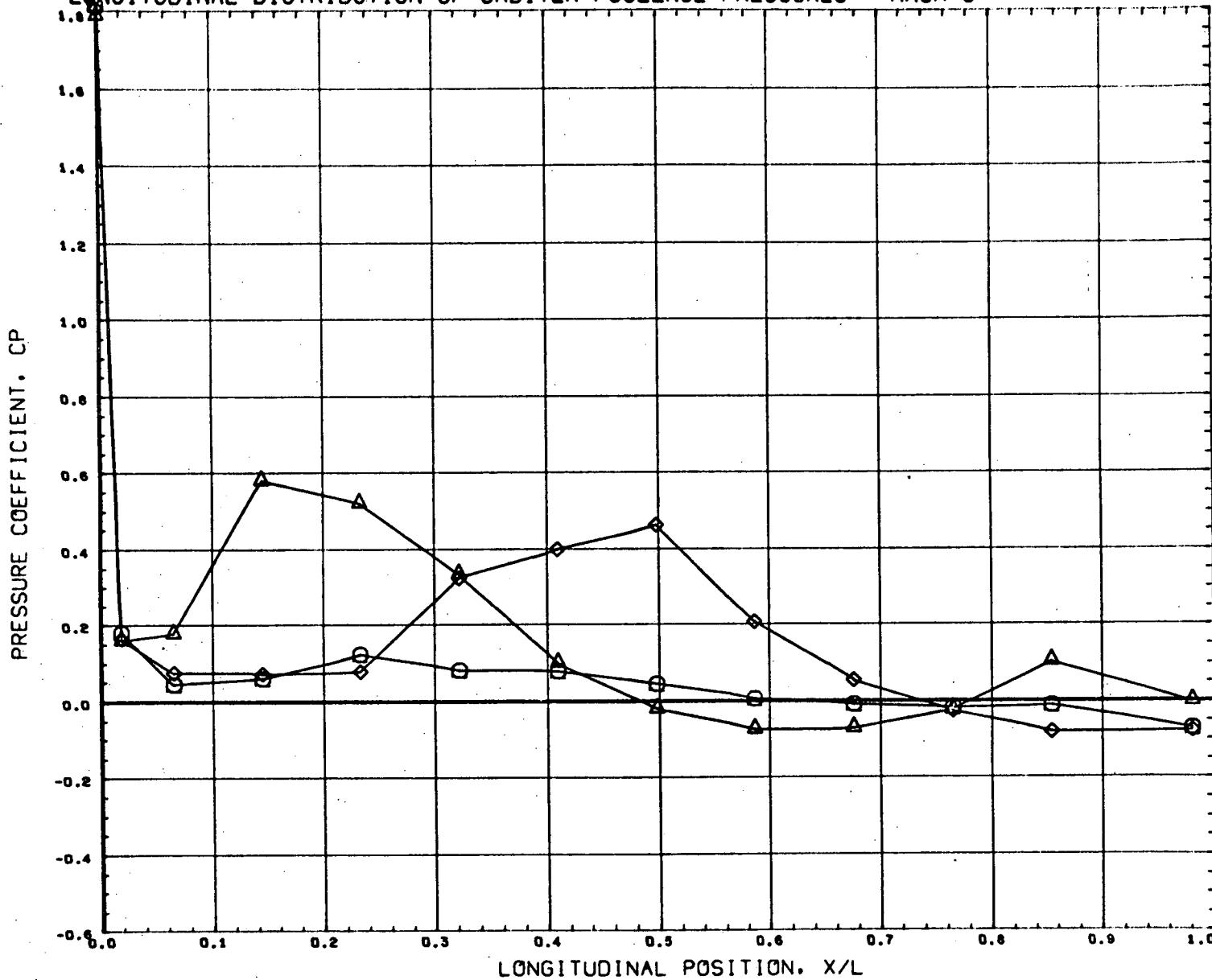
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

•FT8322•

PAGE 56

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/Z DELTAZ
 □ - 0.143 0.000 0.120
 △ 0.103 0.000 0.226

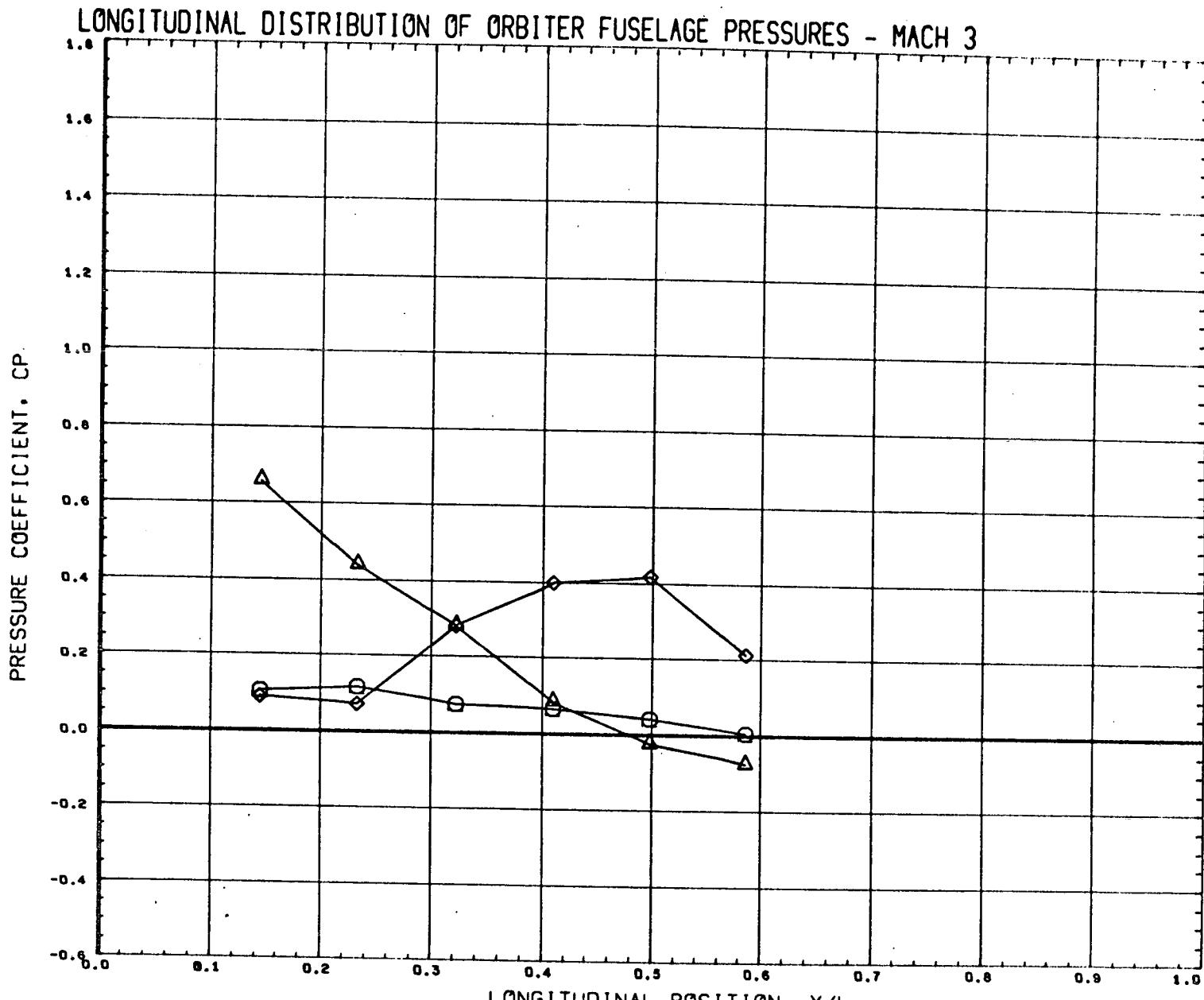
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 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

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SYMBOL DELTAX Y/B DELTAZ

| | | | |
|-------------|---------|-------|-------|
| \circ | - 0.143 | 0.076 | 0.120 |
| \triangle | - 0.103 | | |
| \diamond | - 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|-------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | | | |

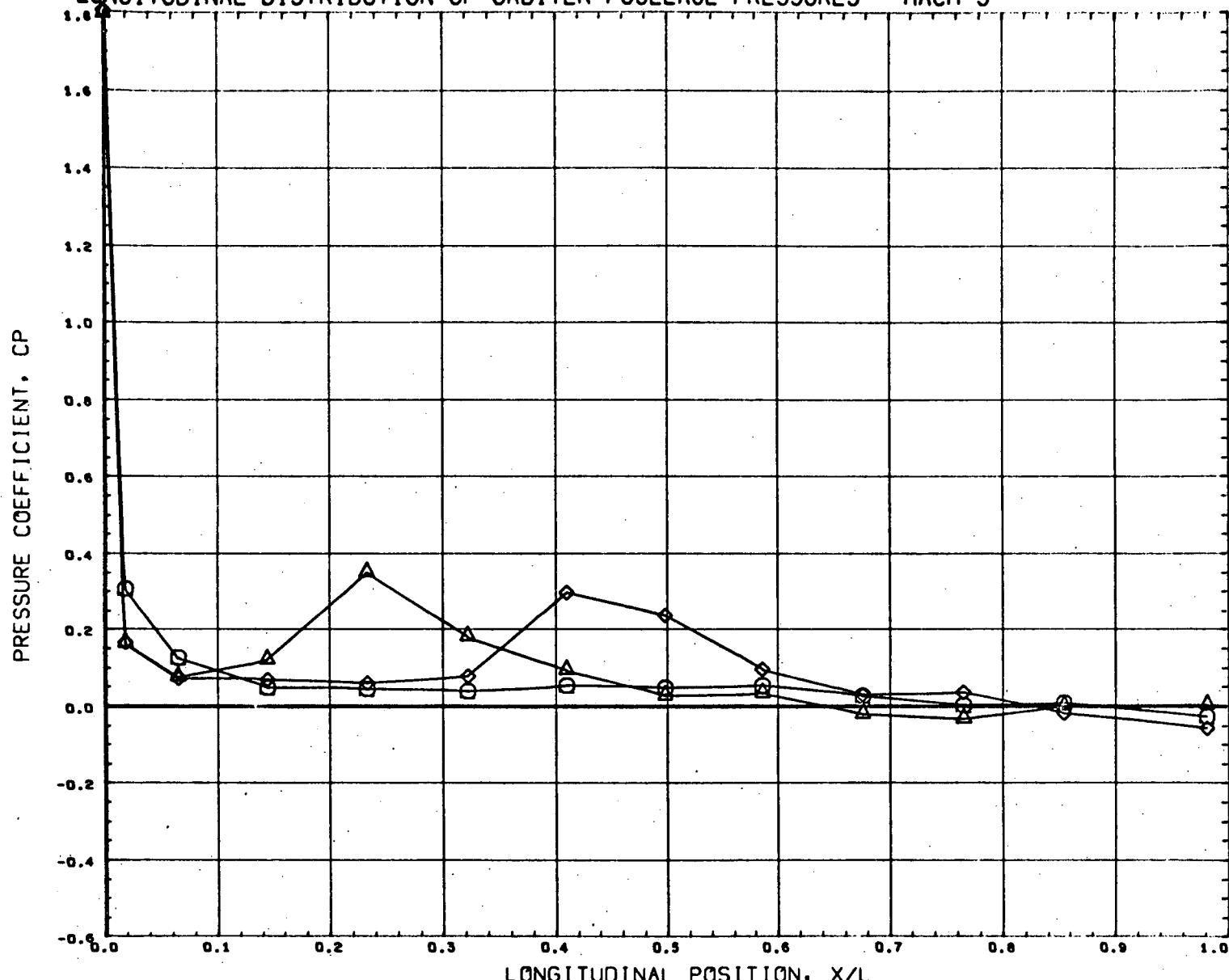
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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



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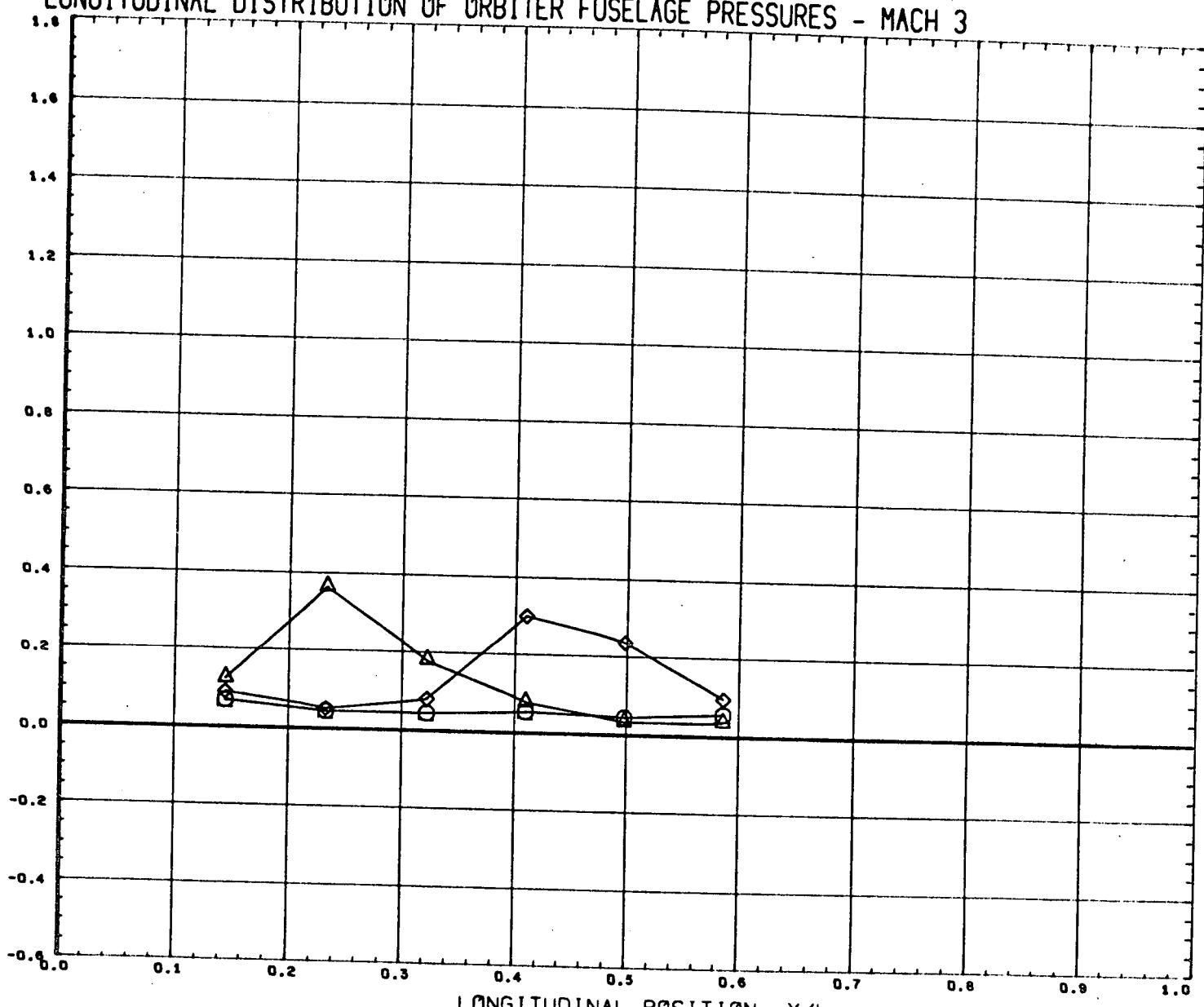
AEDC VA1163 MDAC ORBITER (BODY)

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PAGE 59

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
 - 0.144 0.076 0.151
 ◊ 0.104 0.227

PARAMETRIC VALUES
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 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

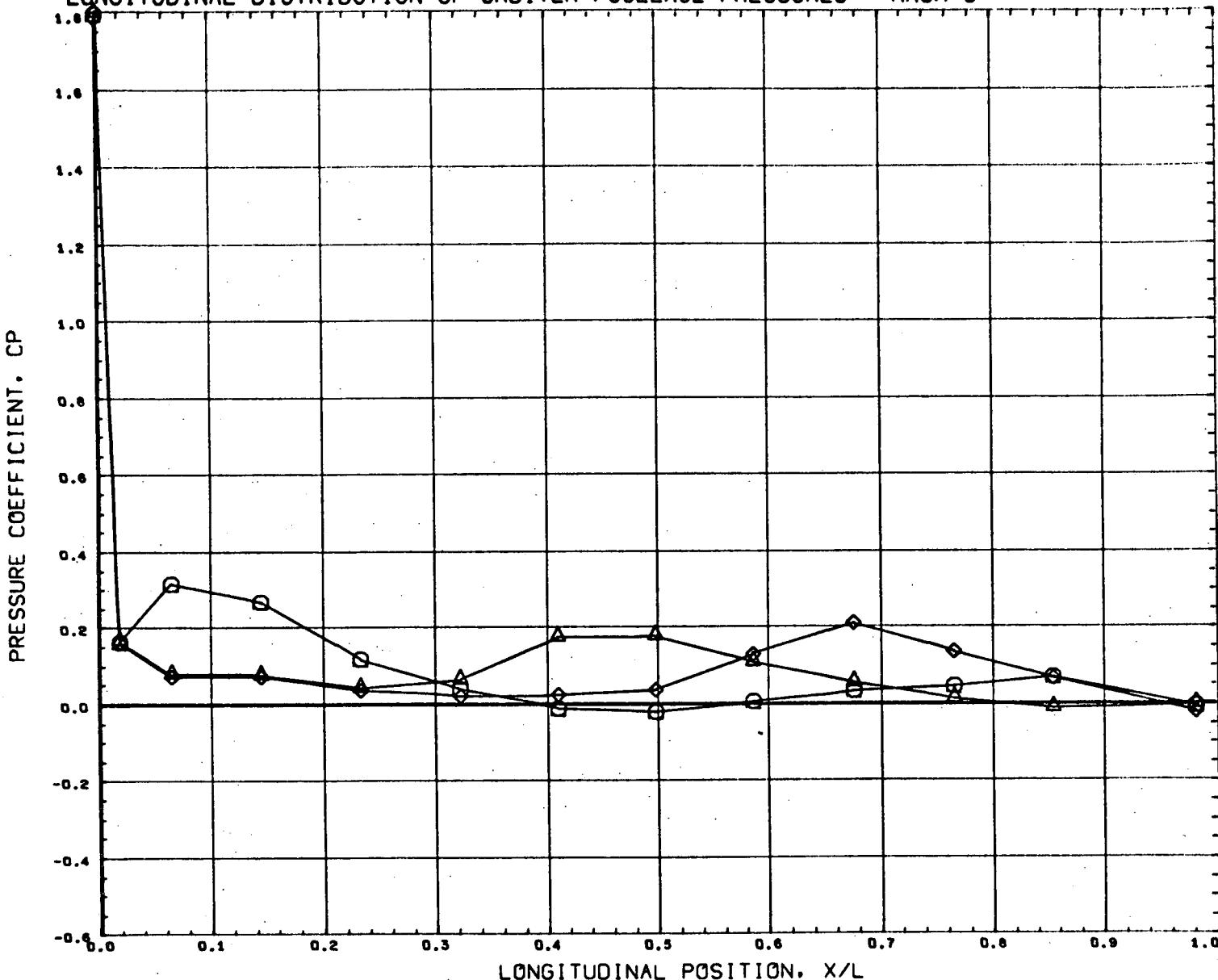
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•FT8323•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

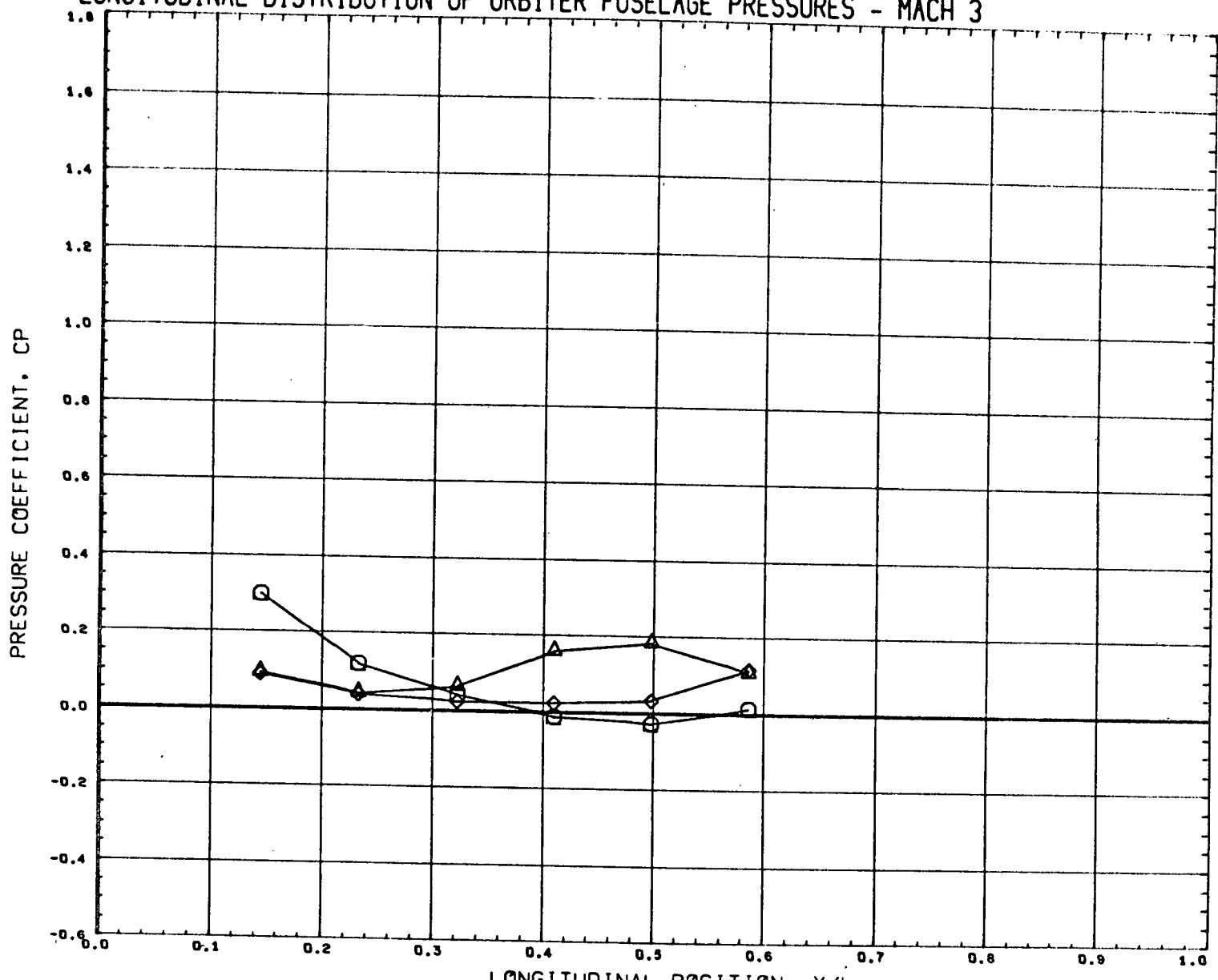


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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

○ - 0.143 0.076 0.228

△ 0.103

◊ 0.227

PARAMETRIC VALUES

| | | | |
|--------|-------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

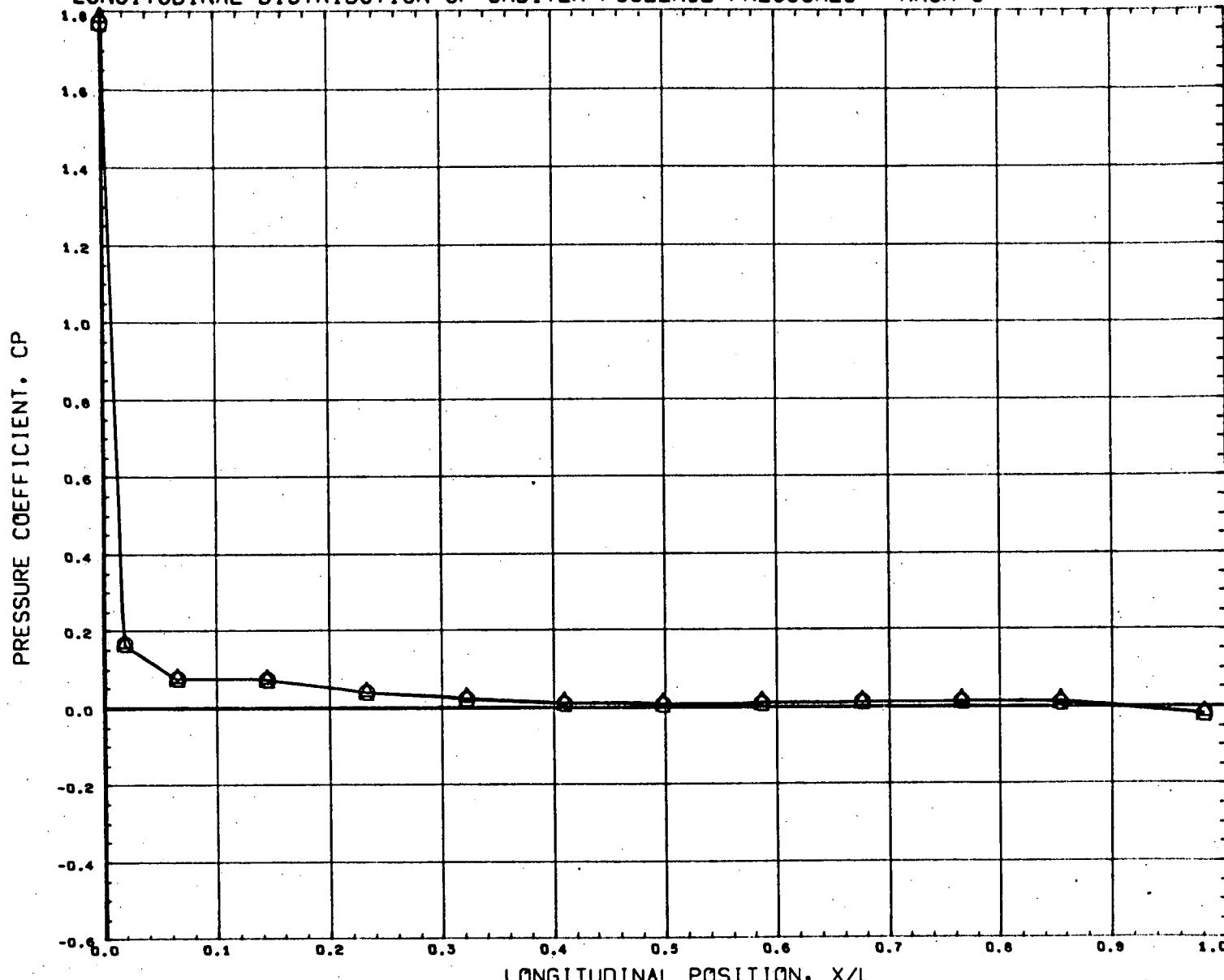
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•FT8323•

PAGE 62

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



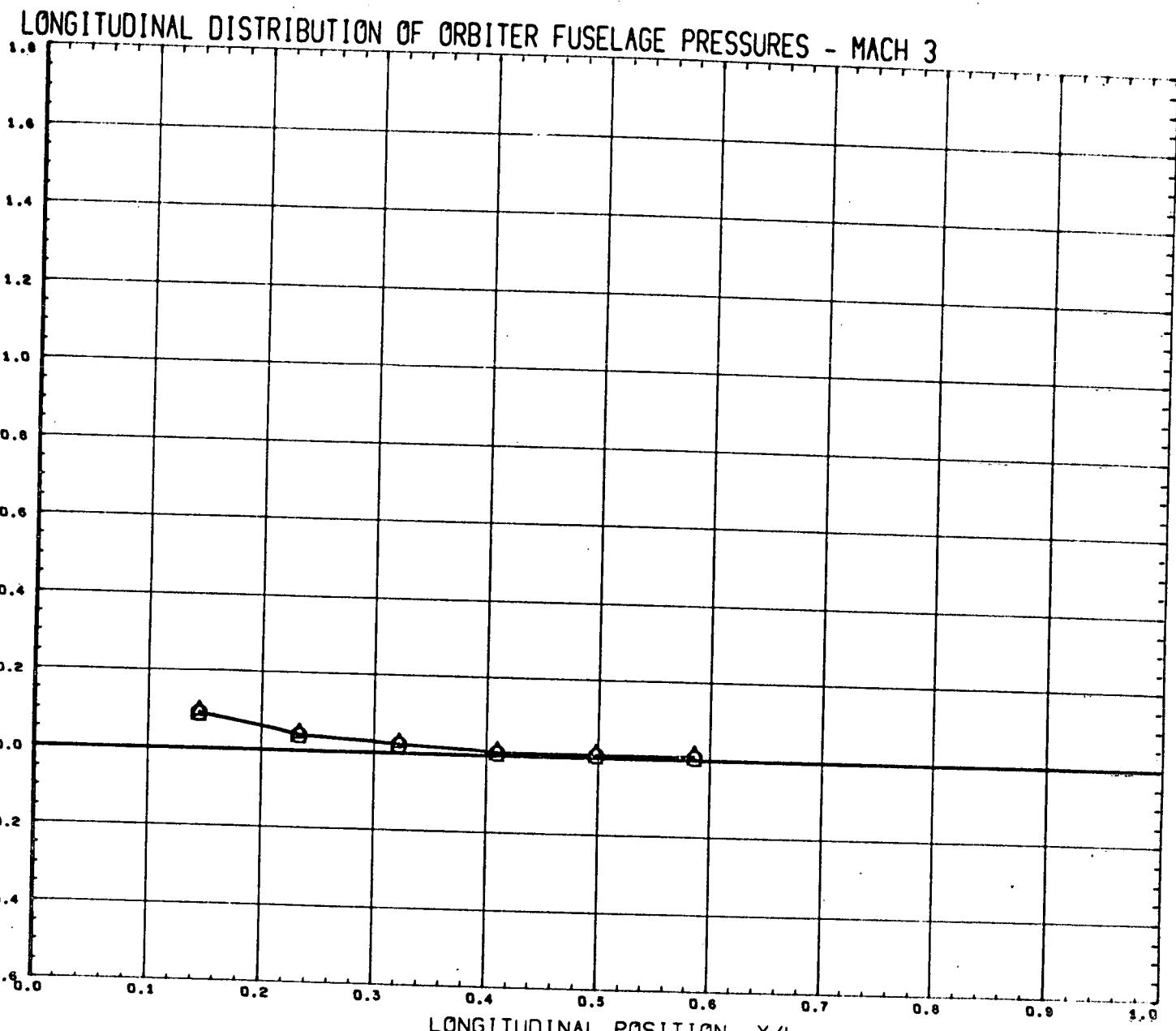
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

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PRESSURE COEFFICIENT. CP



SYMBOL DELTAX Y/B DELTAZ
 - 0.391 0.076 0.908
 0.514

PARAMETRIC VALUES
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ALPHAI 0.000 ORBPOW 0.000
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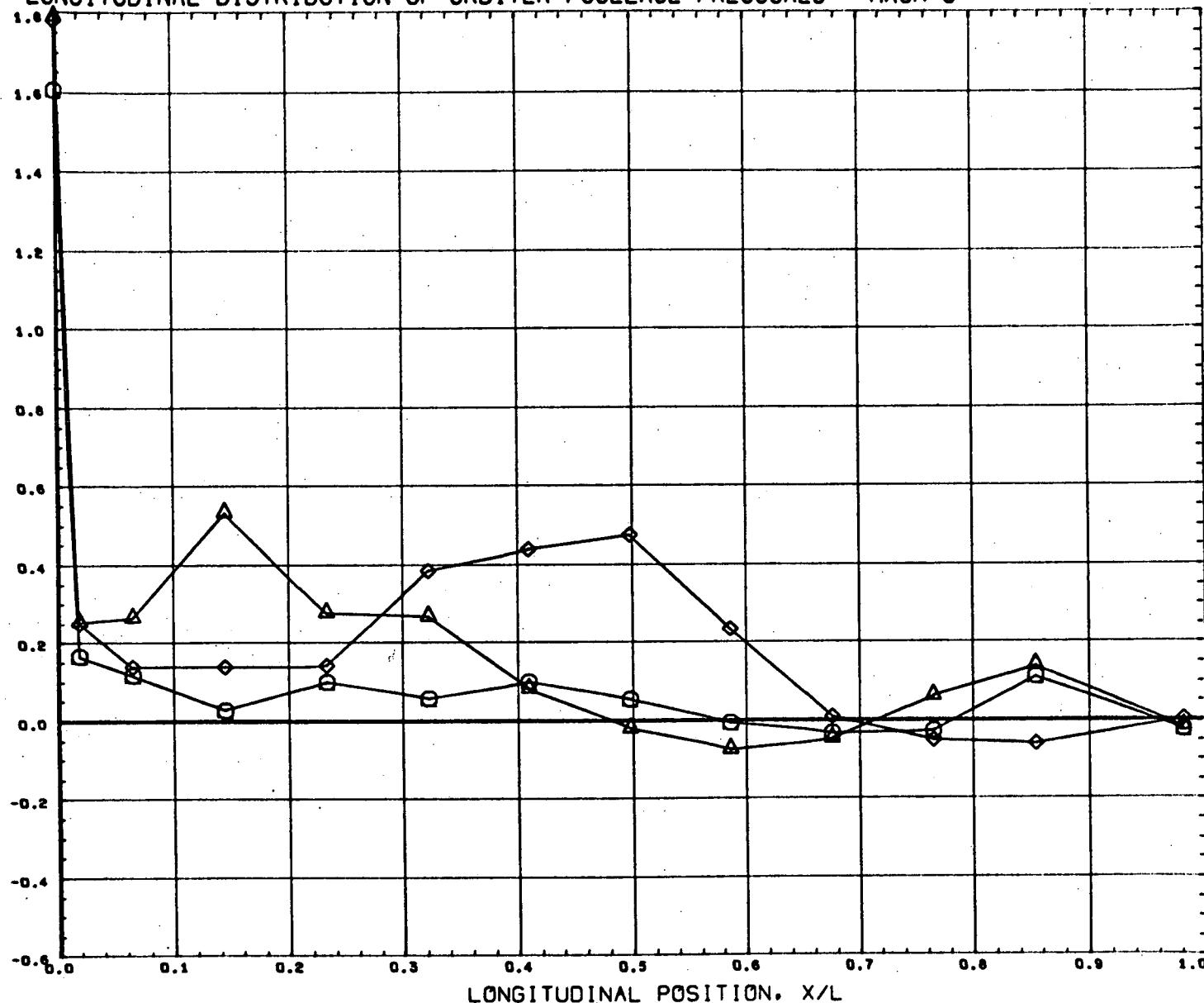
AEDC VA1163 MDAC ORBITER (BODY)

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 0.000 | 0.120 |
| □ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------|
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| BSTPOW | 0.000 | |

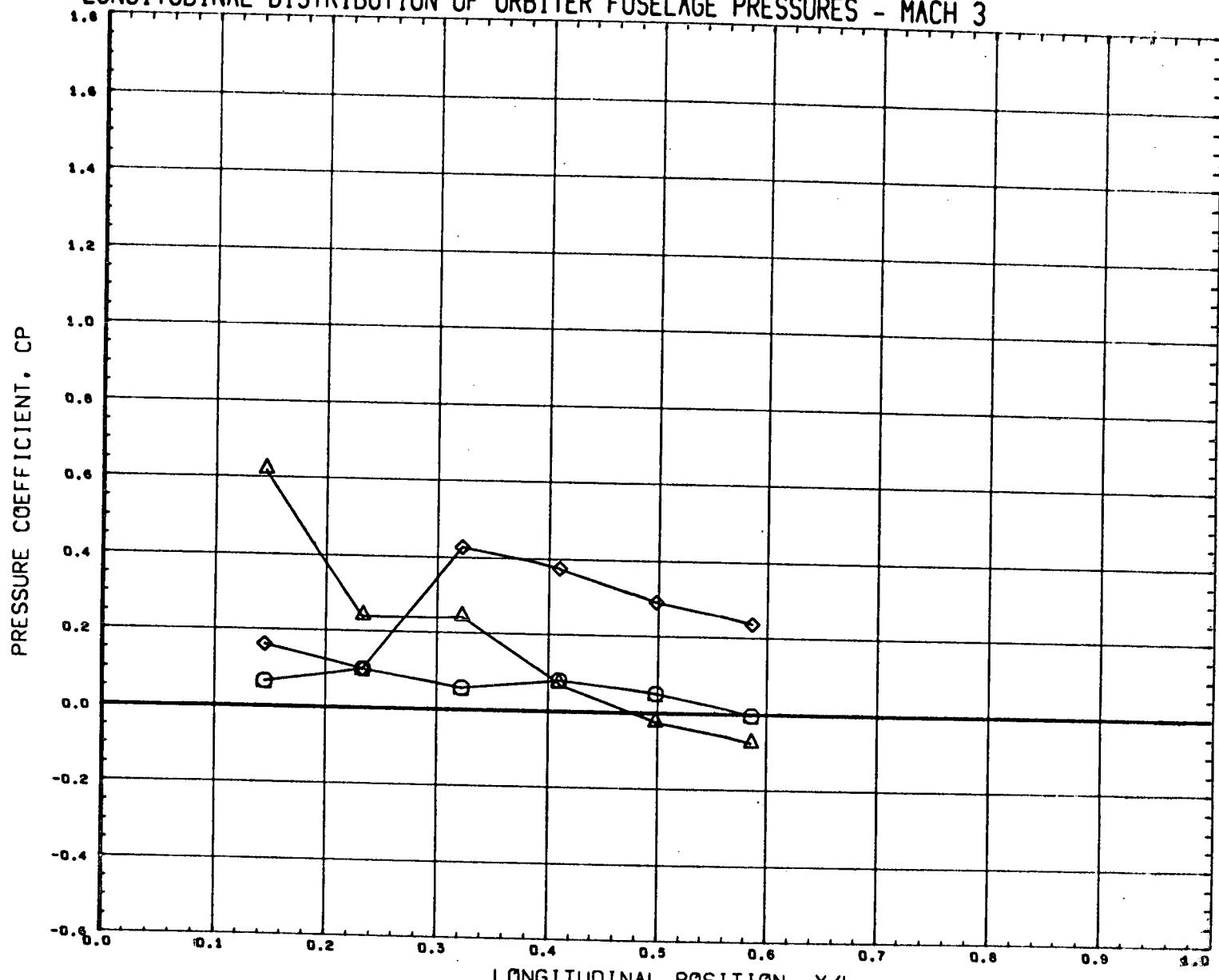
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AEDC VA1163 MDAC ORBITER (BODY)

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 - 0.143 0.076 0.120
 0.103 0.226

PARAMETRIC VALUES
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 BSTPOW 0.000

REFERENCE FILE

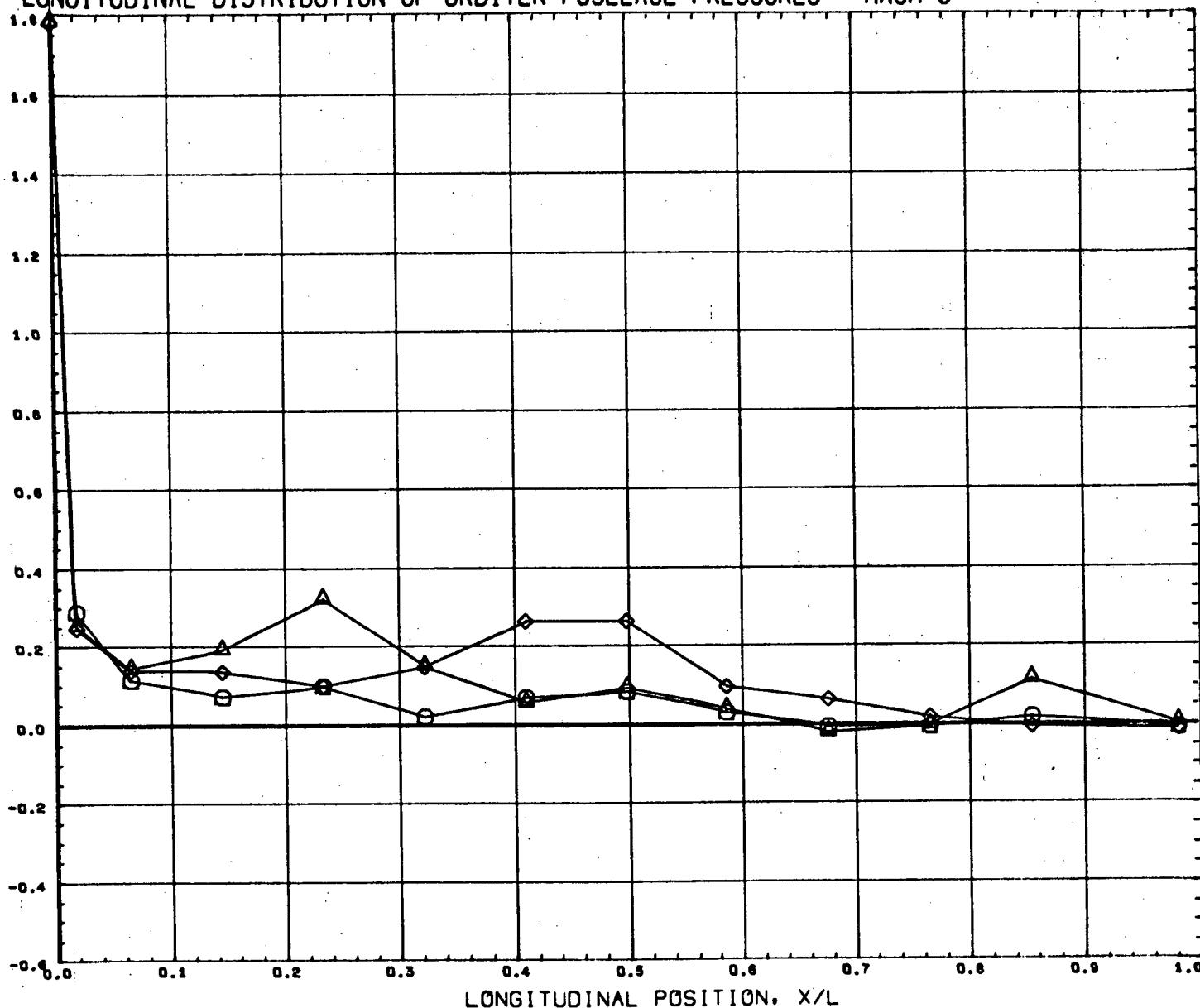
AEDC VA1163 MDAC ORBITER (BODY)

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
 □ 0.143 0.000 0.151
 ◇ 0.103 0.227

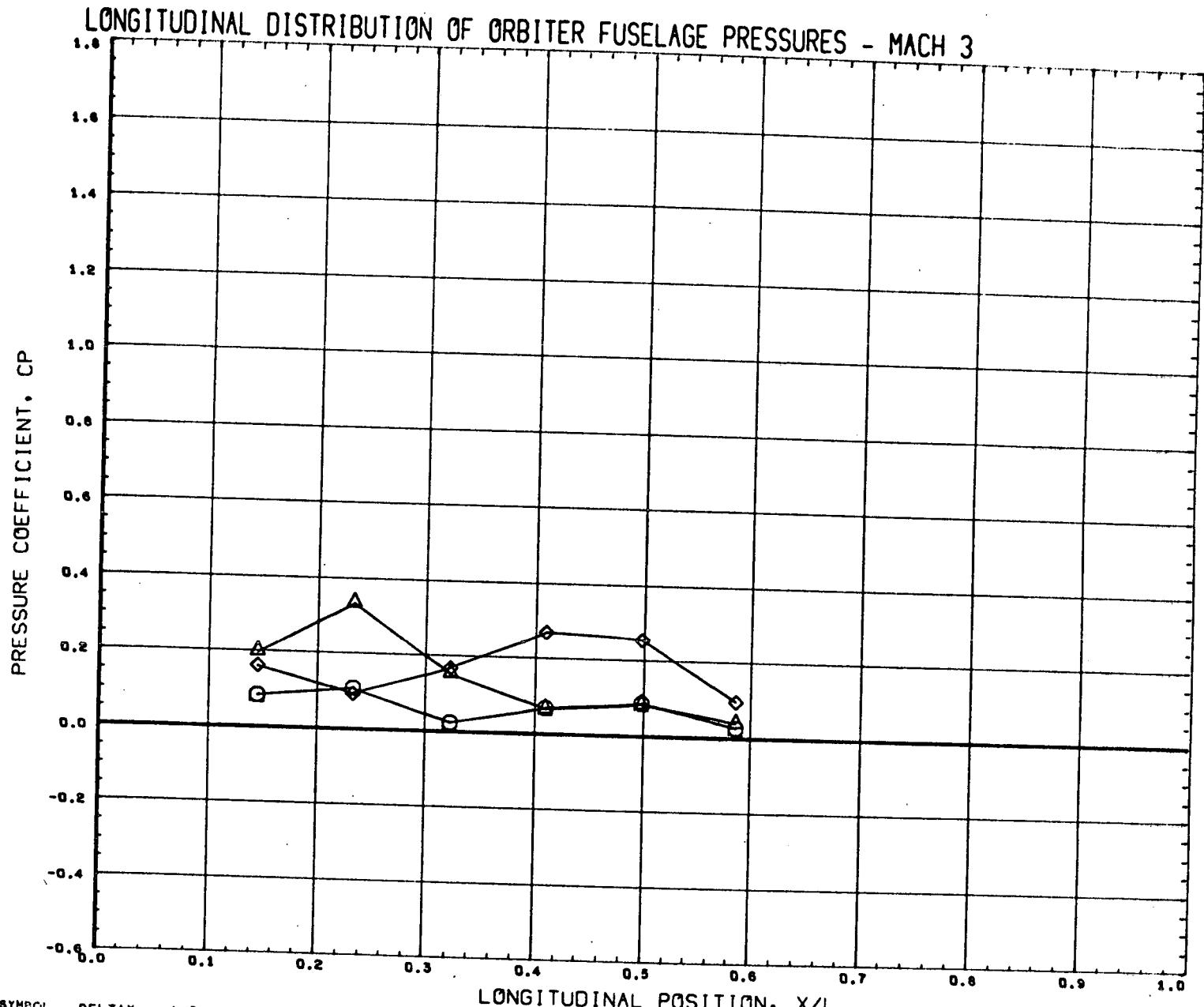
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 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

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SYMBOL DELTAX Y/B DELTAZ

△ 0.143 0.076 0.191

□ 0.103 0.103 0.227

PARAMETRIC VALUES

| | | | |
|--------|-------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

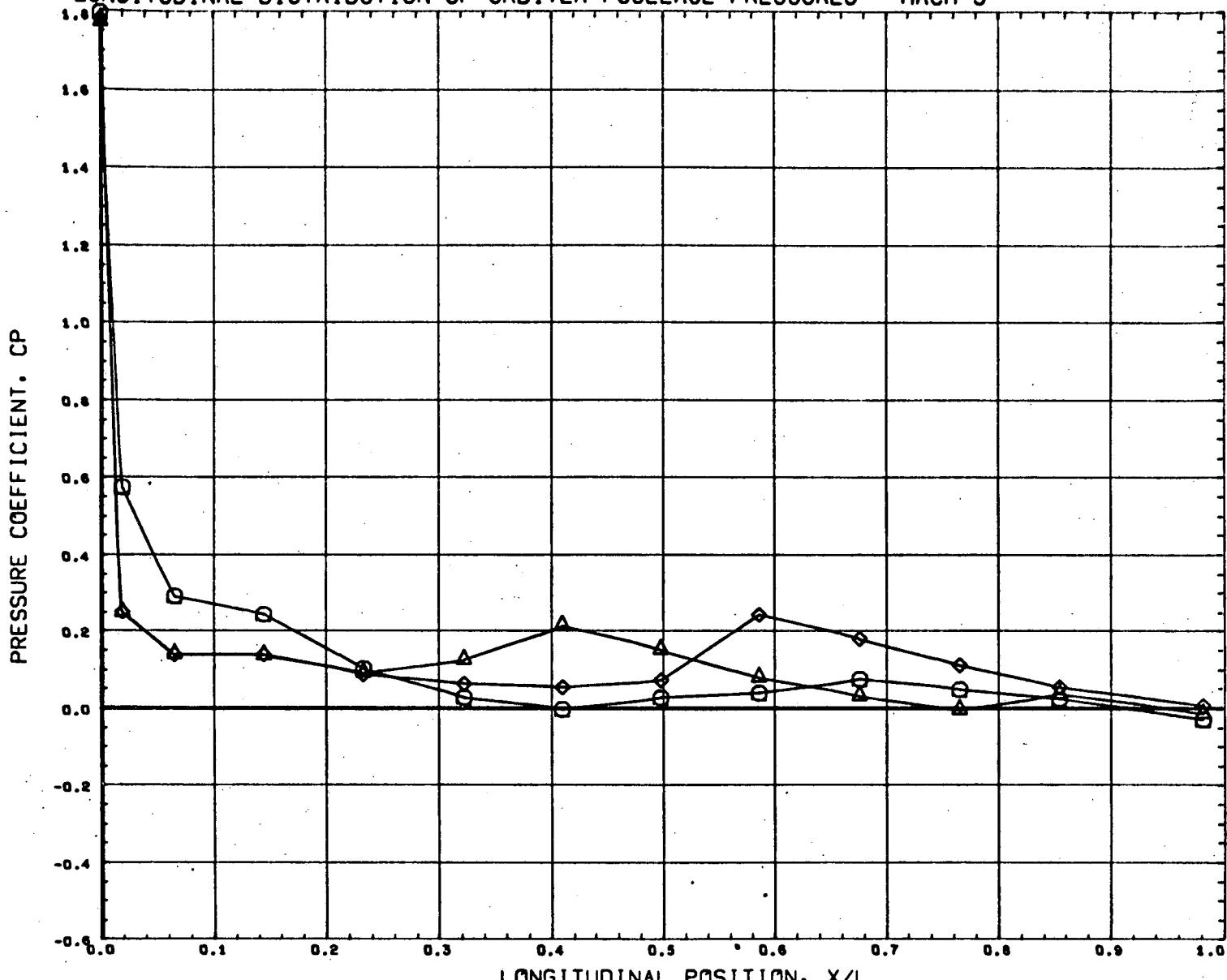
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AEDC VA1163 MDAC ORBITER (BODY)

•FT8324•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 □ - 0.143 0.000 0.228
 ◇ 0.103 0.228

PARAMETRIC VALUES
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 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

REFERENCE FILE

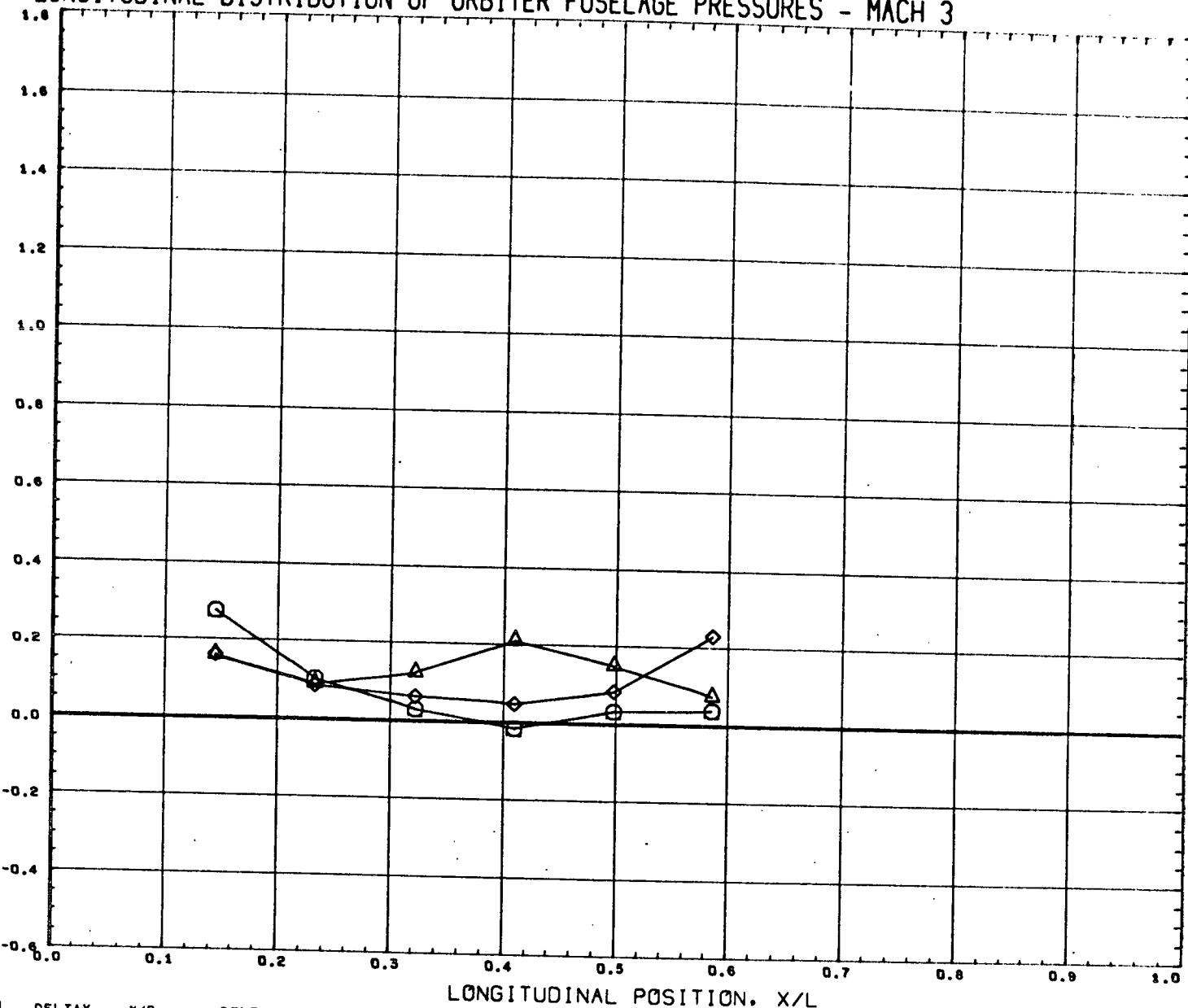
AEDC VA1163 MDAC ORBITER (BODY)

•FT8324•

PAGE 69

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX Y/B DELTAZ

- - 0.143 0.076 0.228
- △ 0.103
- ◊ 0.228

PARAMETRIC VALUES

| | | | |
|--------|-------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

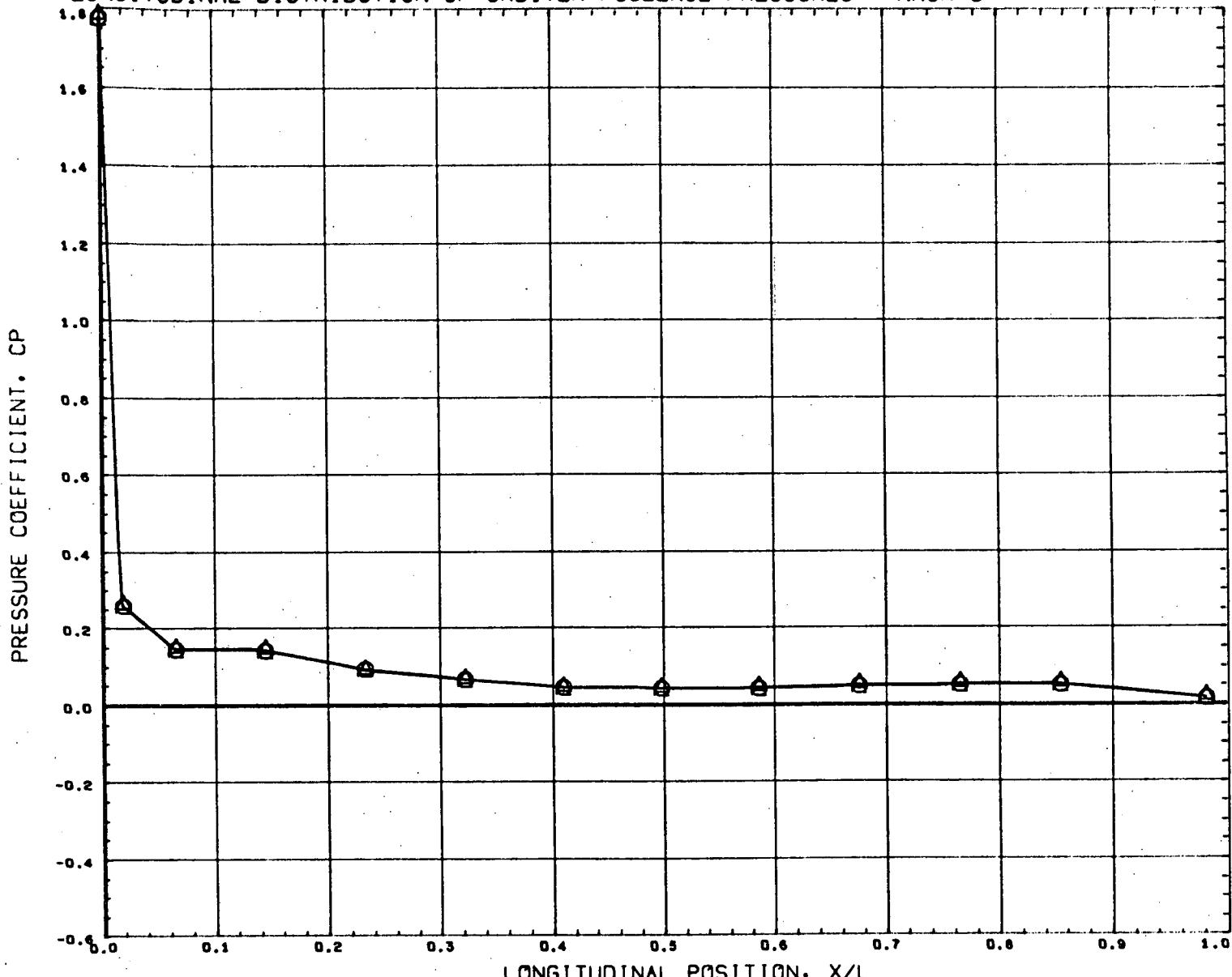
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AEDC VA1163 MDAC ORBITER (BODY)

•FT8324•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

○ - 0.390 0.000 0.908

△ 0.511

PARAMETRIC VALUES

| | | | |
|--------|-------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

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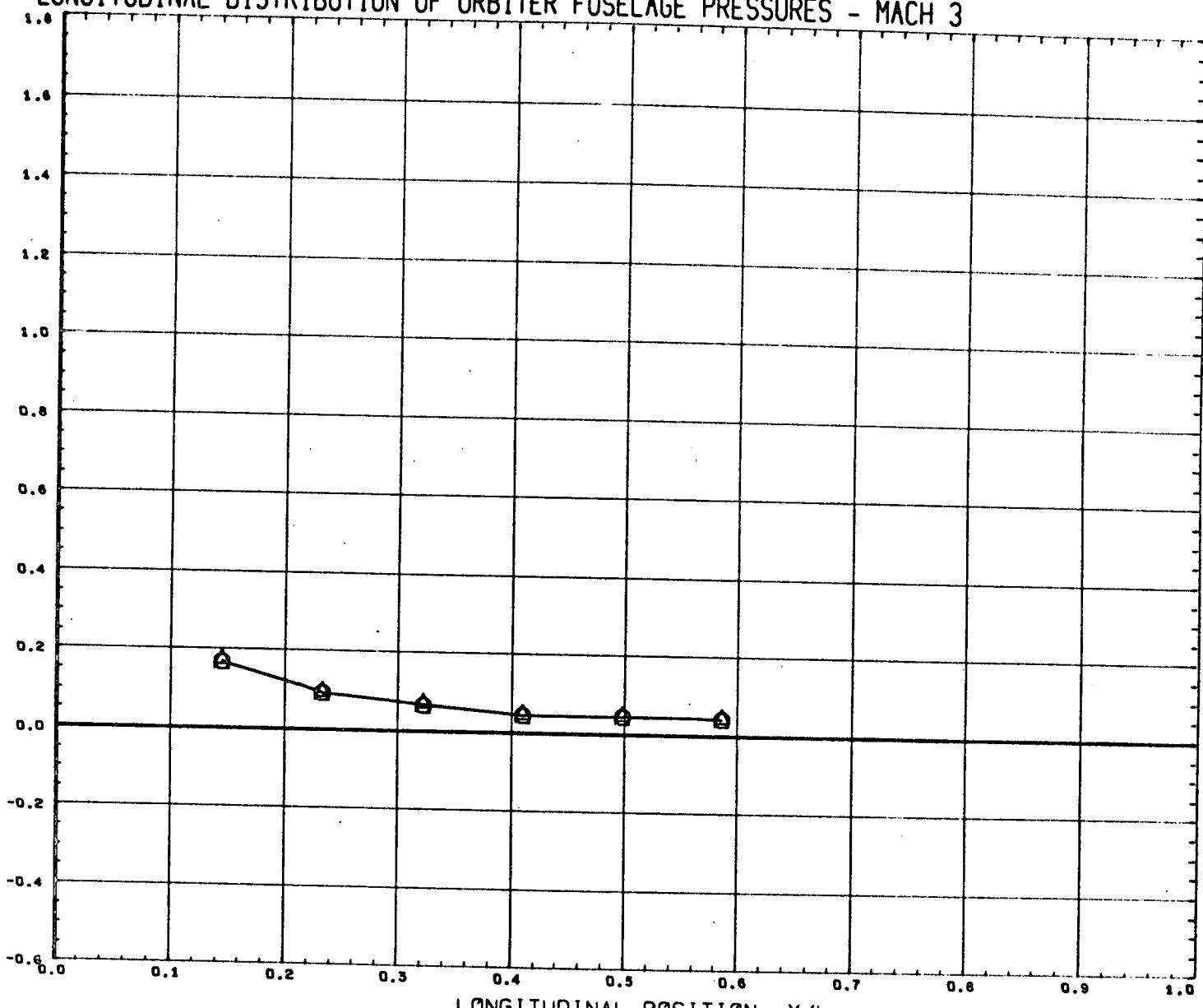
AEDC VA1163 MDAC ORBITER (BODY)

•FT8324•

PAGE 71

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX Y/B DELTAZ
○ - 0.390 0.076 0.908
△ 0.511

PARAMETRIC VALUES
 ALPHAB 5.020 MACH 3.000
 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

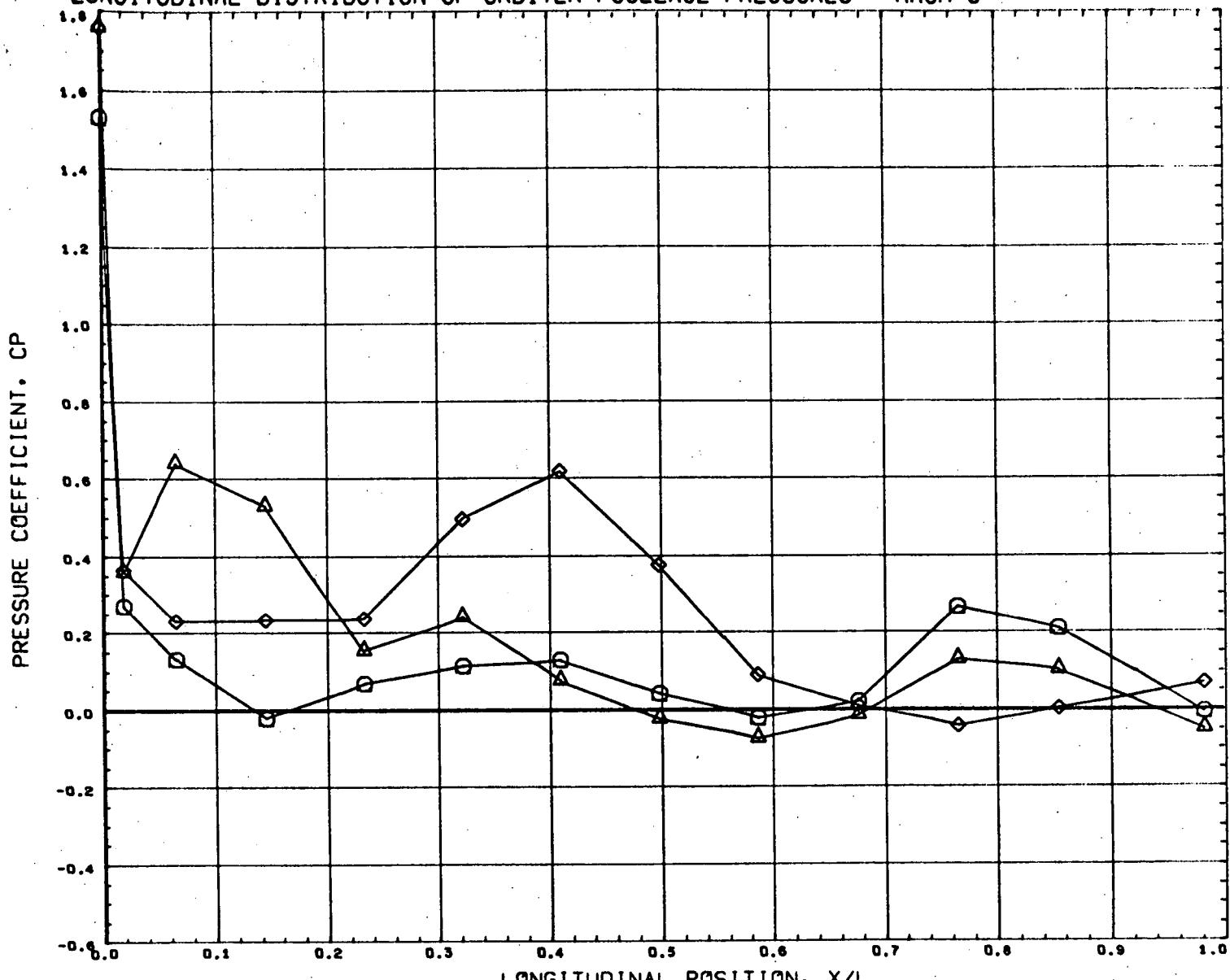
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

•FT8324•

PAGE 72

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 ○ - 0.143 0.000 0.120
 △ 0.101 0.000 0.000
 ◇ 0.226 0.000 0.000

PARAMETRIC VALUES
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 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

REFERENCE FILE

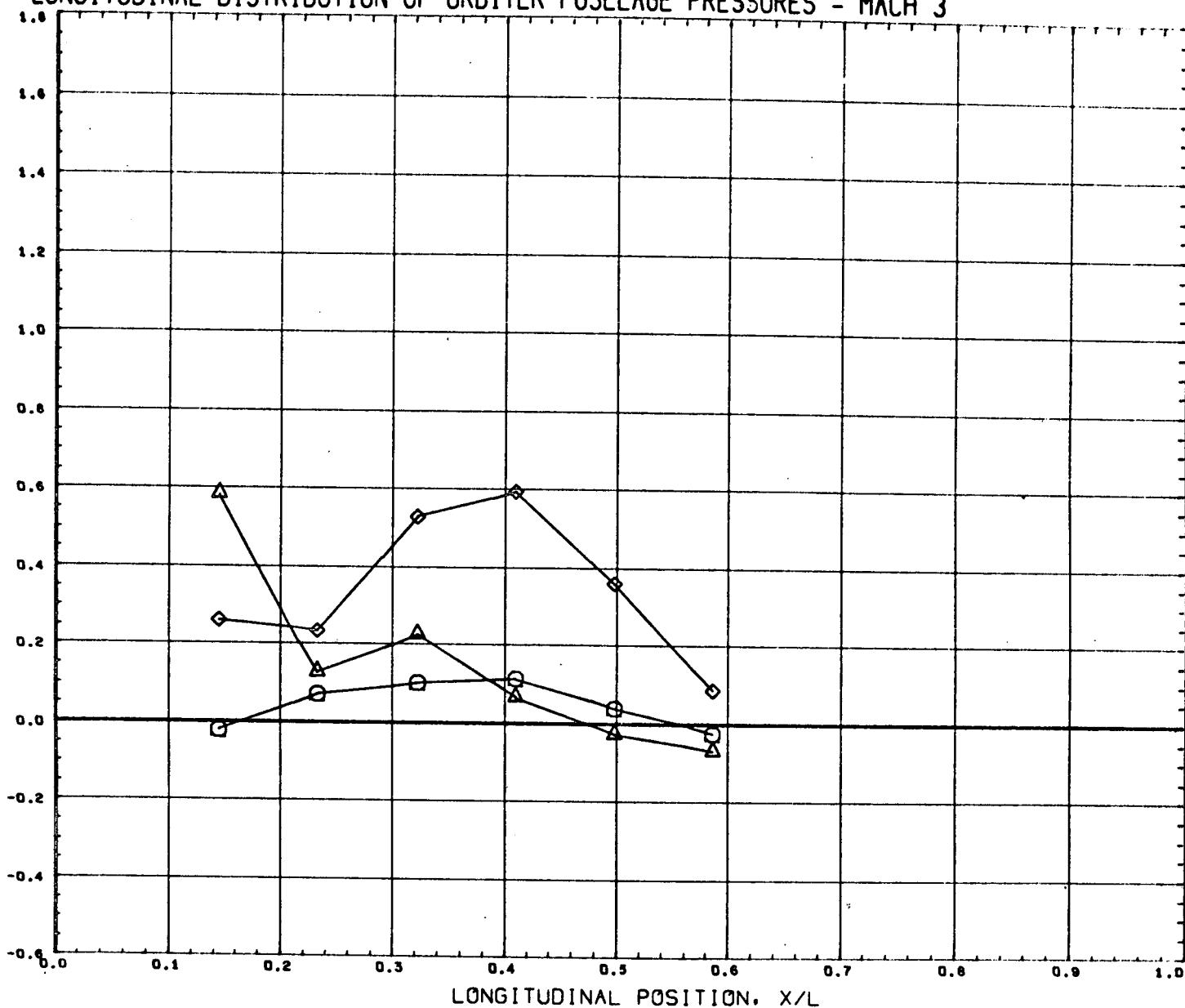
AEDC VA1163 MDAC ORBITER (BODY)

•FT8325•

PAGE 73

LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

- - 0.143 0.076 0.120
- △ - 0.101
- ◊ - 0.226

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

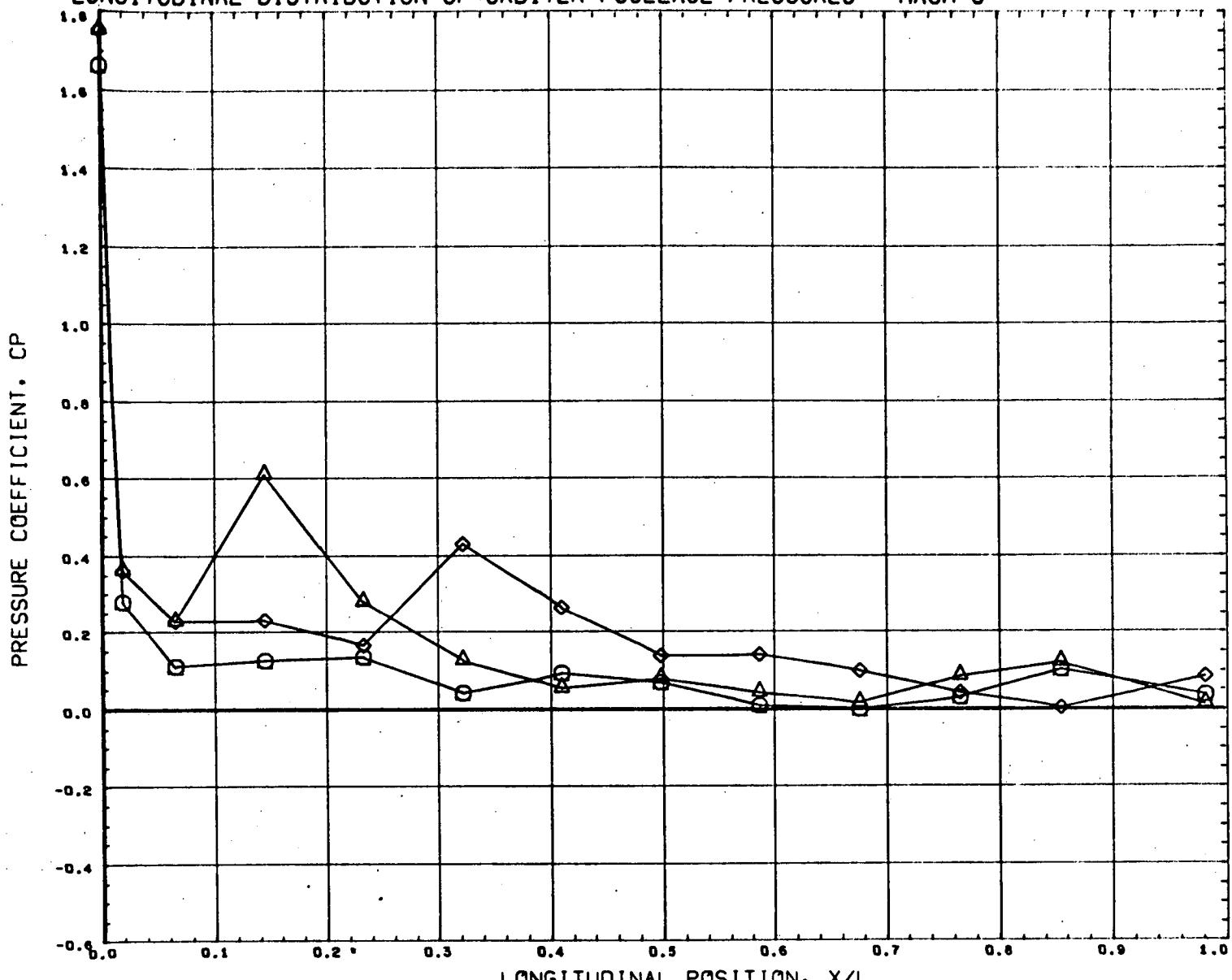
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AEDC VA1163 MDAC ORBITER (BODY)

•FT8325•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 □ - 0.143 0.000 0.151
 ▲ 0.103
 ◇ 0.226

PARAMETRIC VALUES
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 BSTPOW 0.000

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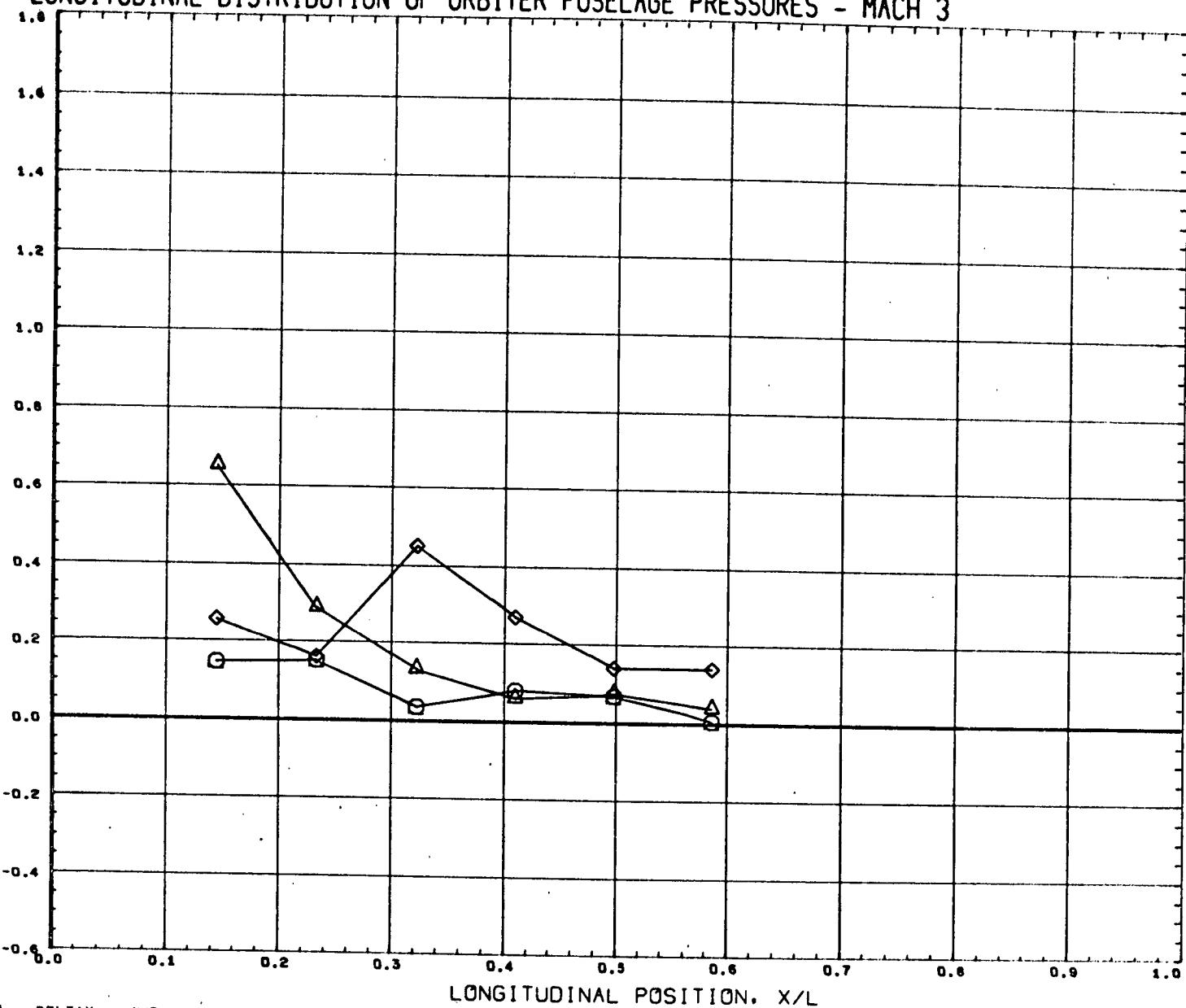
AEDC VA1163 MDAC ORBITER (BODY)

•FT8325•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX Y/B DELTAZ

○ - 0.143 0.076 0.151

△ 0.103

◊ 0.226

PARAMETRIC VALUES

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|-------|
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

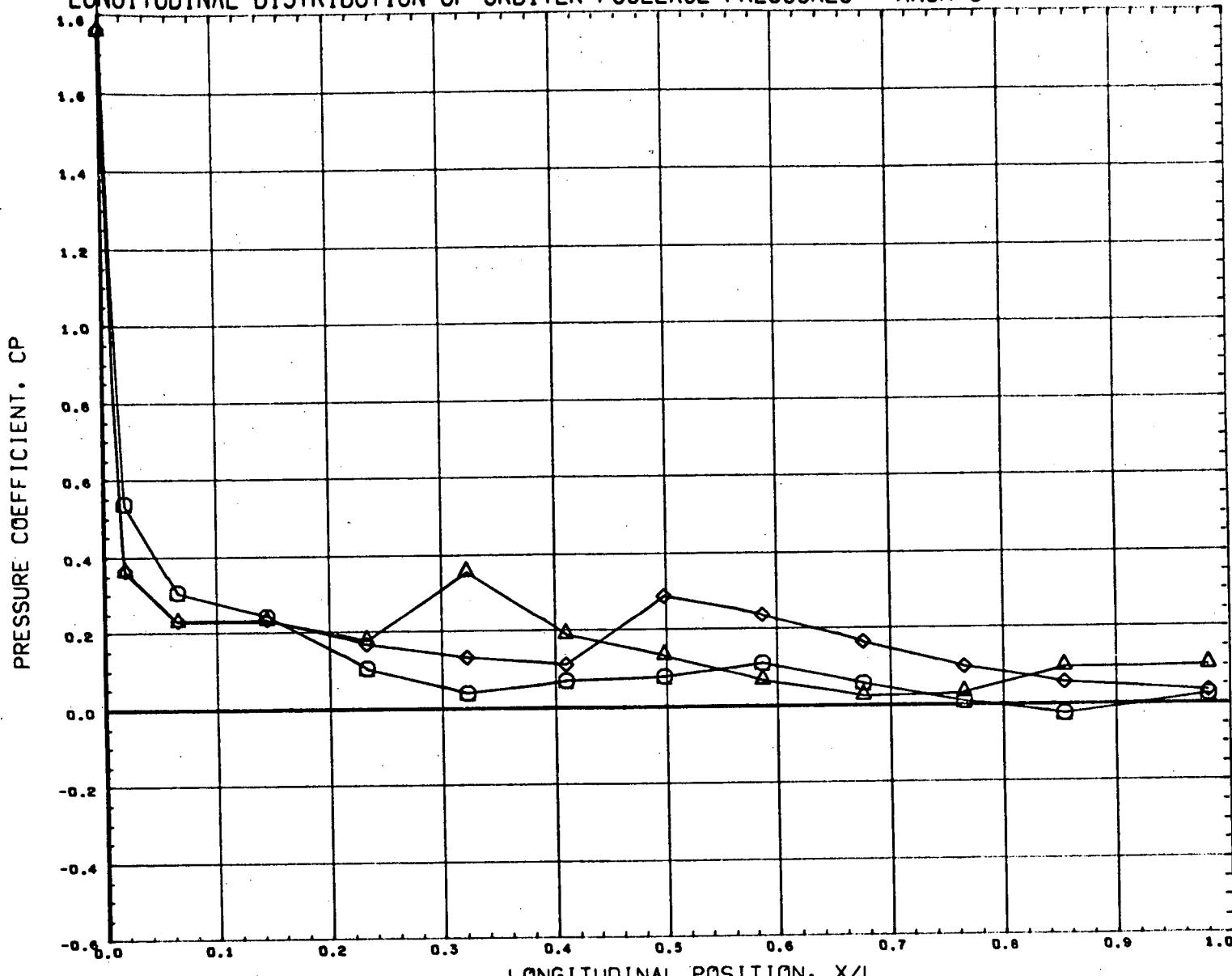
AEDC VAI163 MDAC ORBITER (BODY)

•FT8325•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

○ - 0.144 0.000 0.226

△ 0.103 0.226

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|-------|
| ALPHAB | 10.004 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

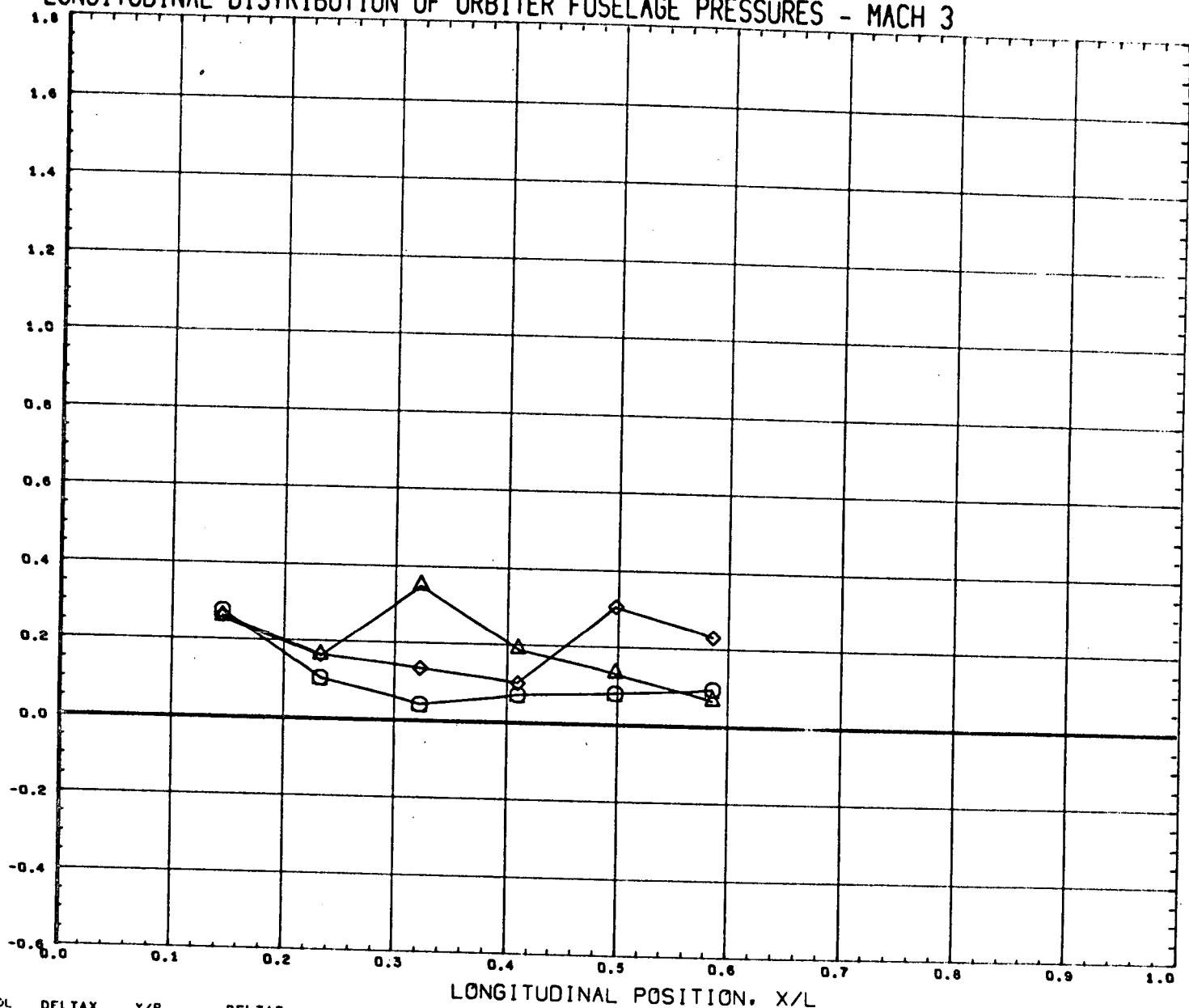
REFERENCE FILE
AEDC VA1163 MDAC ORBITER (BODY)

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
 ○ - 0.144 0.076 0.228
 △ 0.103 0.226

LONGITUDINAL POSITION, X/L

| | ALPHAB | MACH |
|--------|--------|-------|
| ALPHAI | 10.004 | 3.000 |
| BSTPOW | 0.000 | 0.000 |

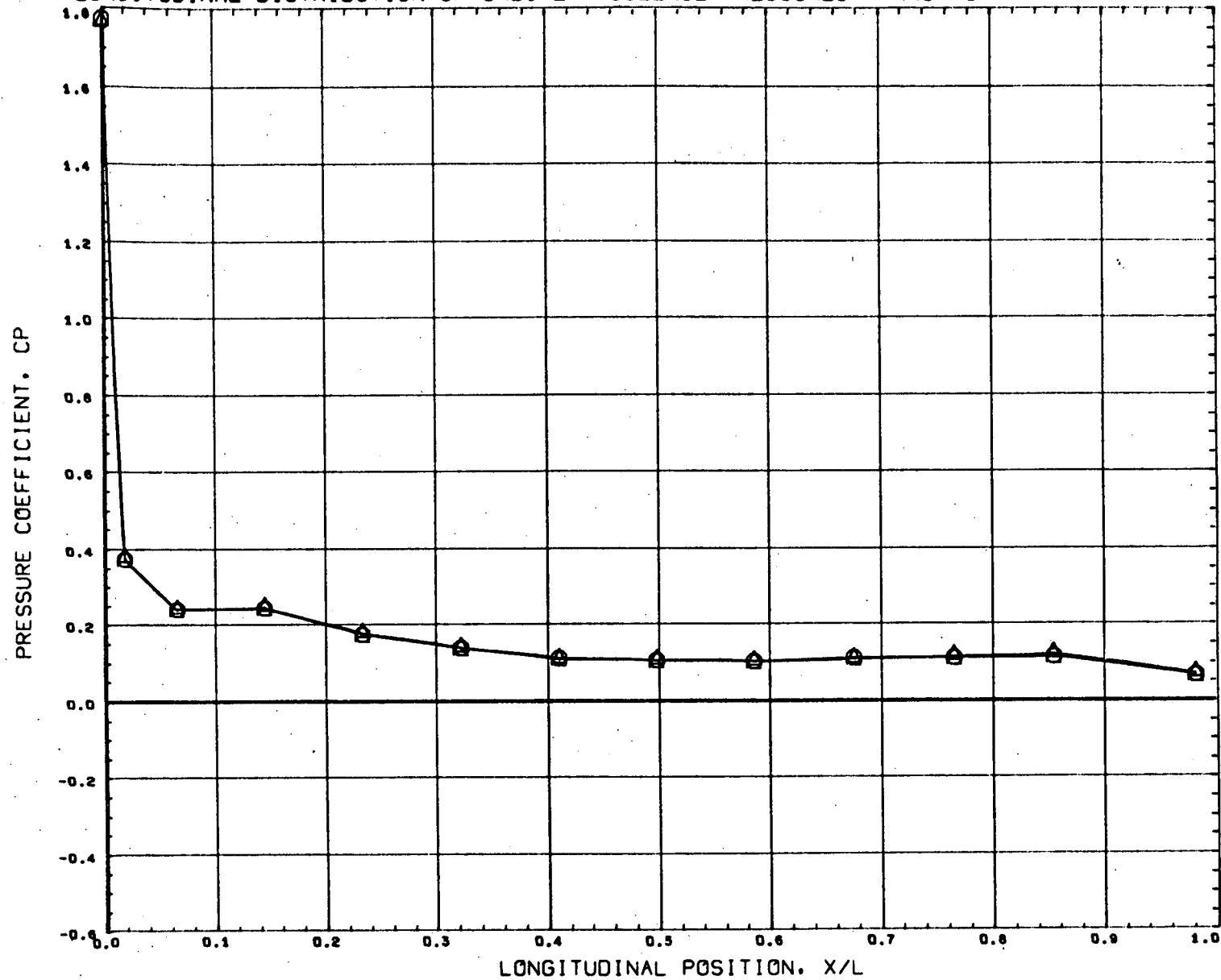
REFERENCE FILE

AEDC VAI163 MDAC ORBITER (BODY)

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

○ - 0.390 0.000 0.908

△ 0.481

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|-------|
| ALPHAB | 10.004 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

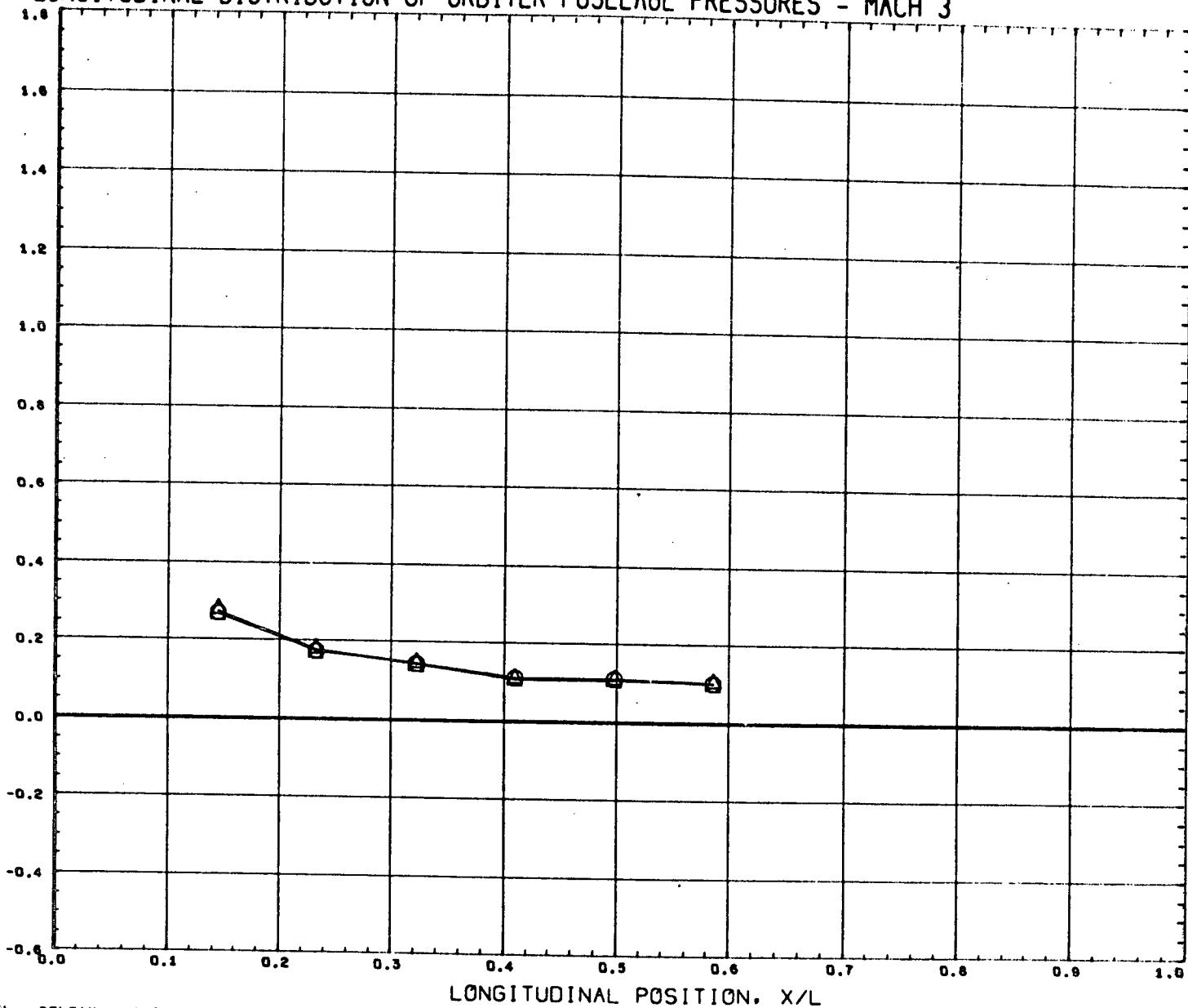
AEDC VA1163 MDAC ORBITER (BODY)

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX Y/B DELTAZ
 ○ - 0.390 0.076 0.908
 △ 0.481

PARAMETRIC VALUES
 ALPHAB 10.004 MACH 3.000
 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

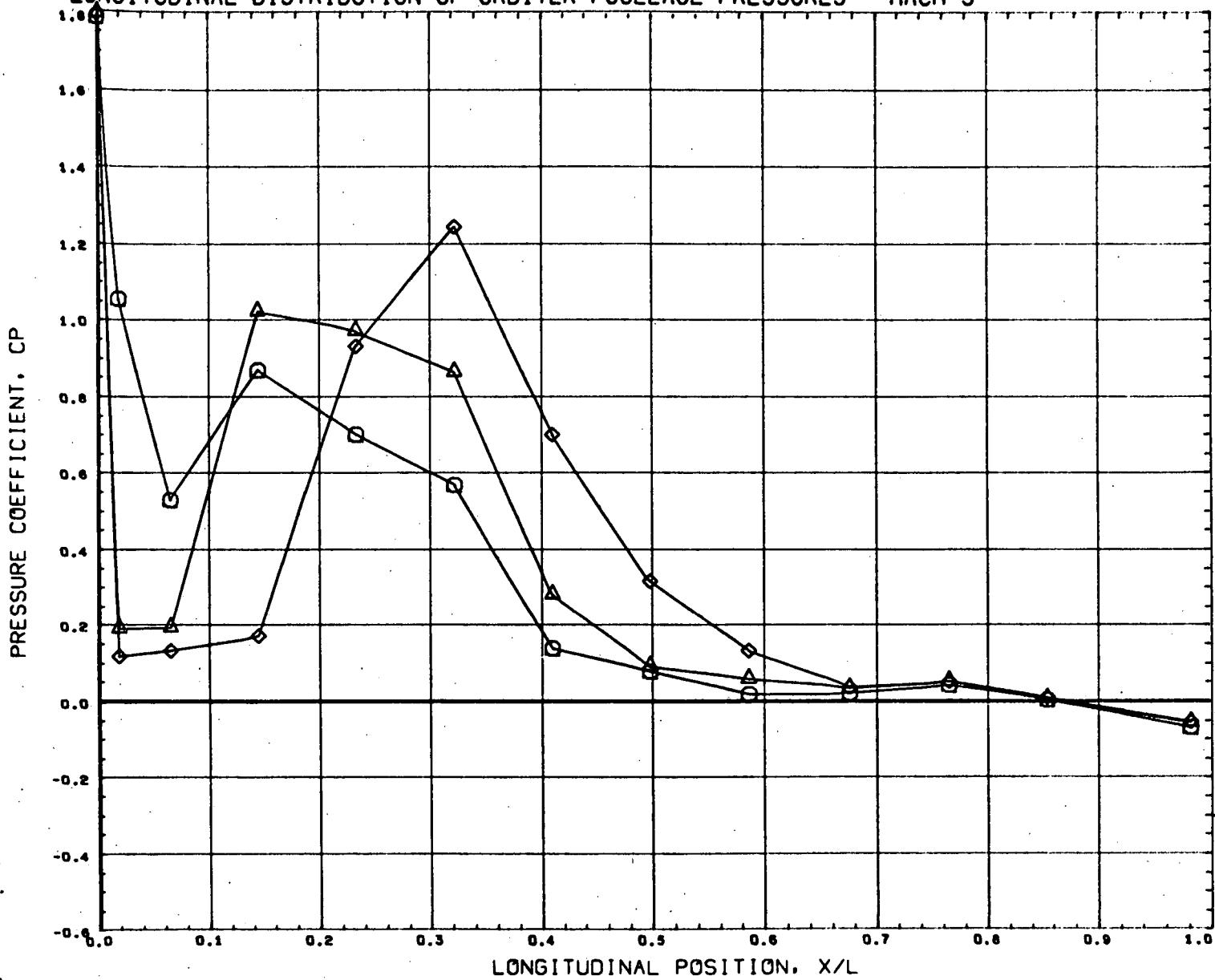
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

•FT8325•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|-------|-------|-------|
| ○ | 0.040 | 0.000 | 0.105 |
| △ | 0.103 | | |
| ◊ | 0.166 | | |

PARAMETRIC VALUES

| | | | | |
|--------|---|-------|--------|-------|
| ALPHAB | - | 9.980 | MACH | 3.000 |
| ALPHAI | | 0.000 | ORBPOW | 0.000 |
| BSTPOW | | 0.000 | | |

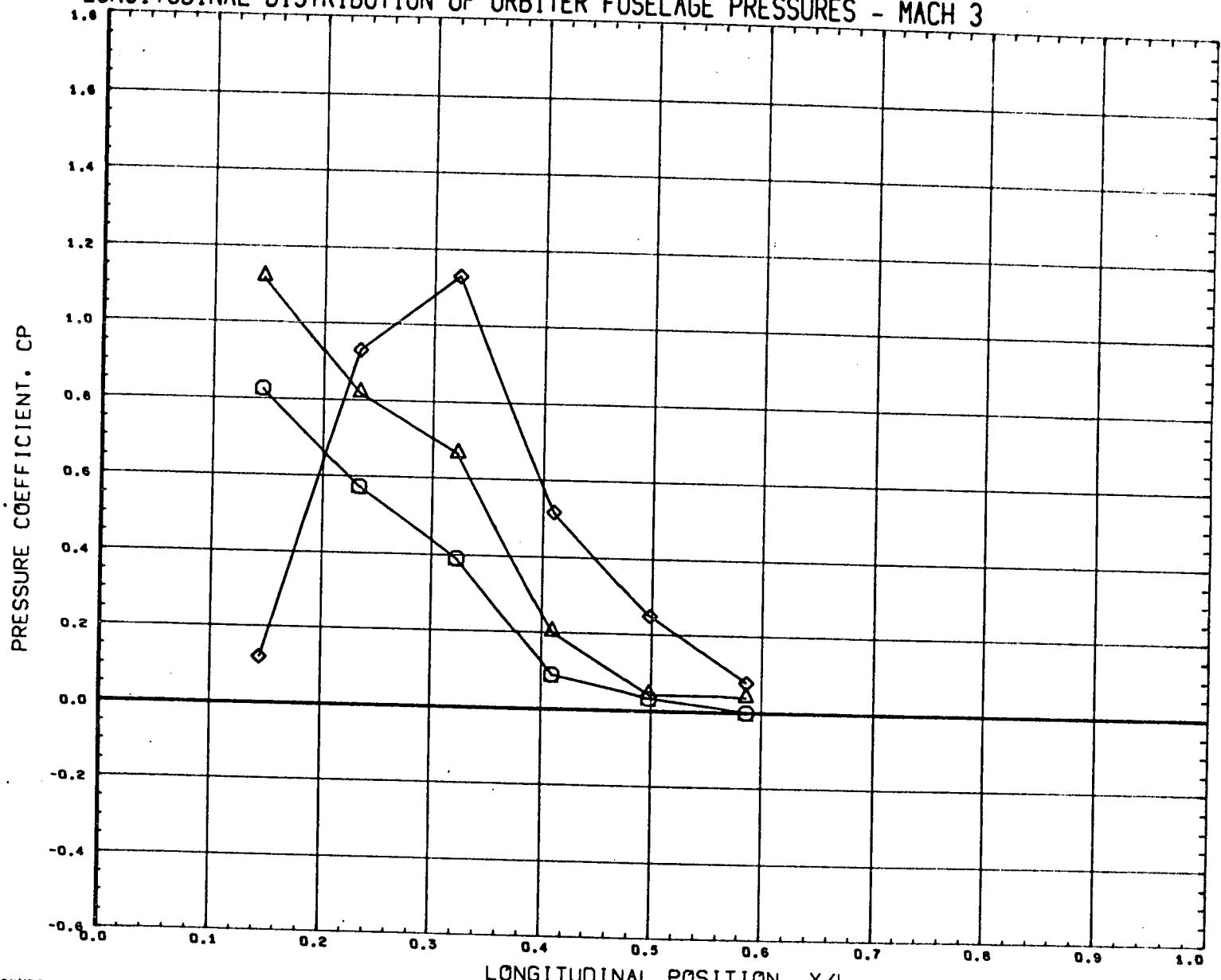
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|-------|-------|-------|
| ○ | 0.040 | 0.076 | 0.105 |
| △ | 0.103 | - | - |
| ◊ | 0.166 | - | - |

PARAMETRIC VALUES

| | | | | |
|--------|-------|-------|--------|-------|
| ALPHAB | - | 9.980 | MACH | 3.000 |
| ALPHAI | 0.000 | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | - | - | - |

REFERENCE FILE

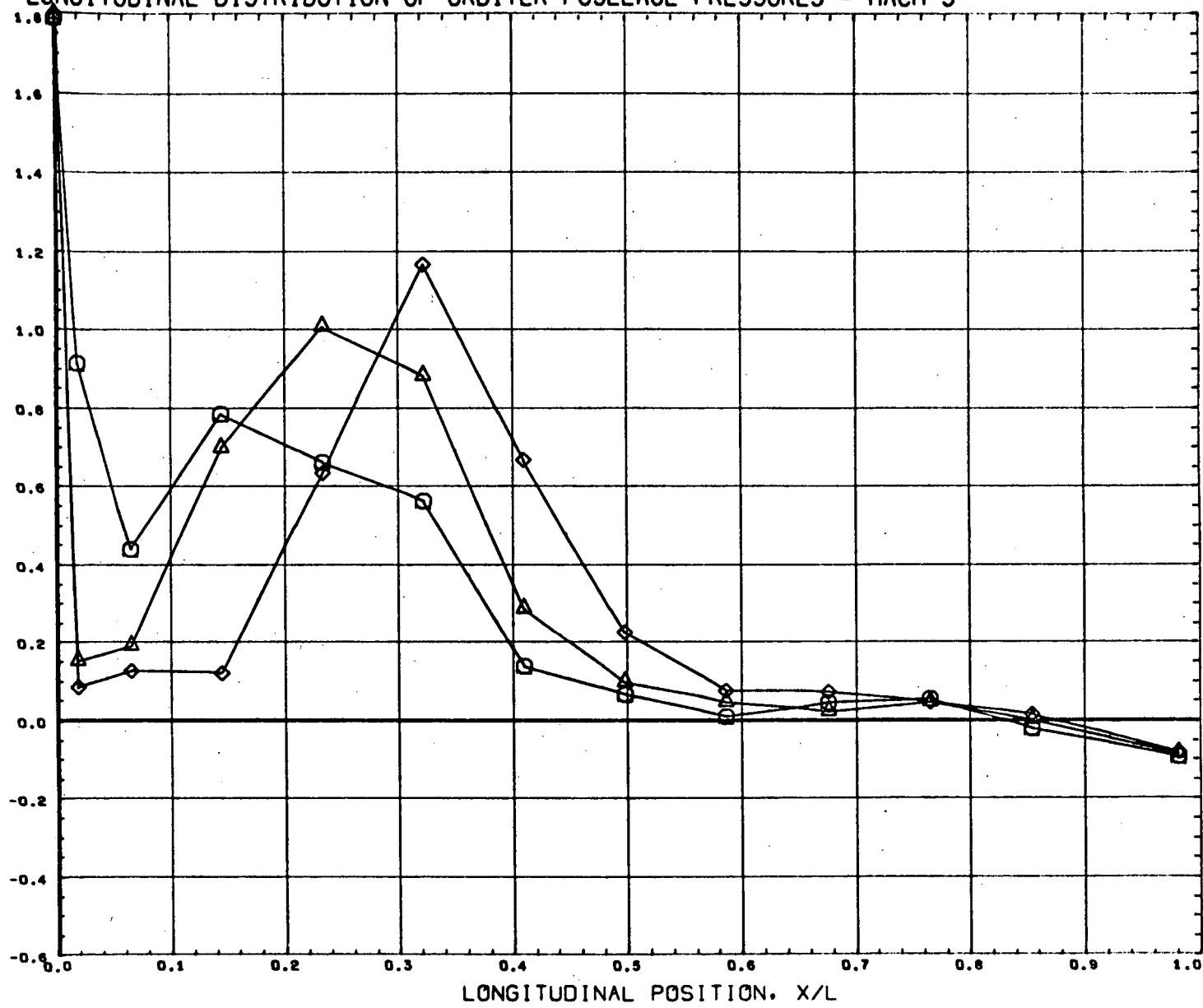
AEDC VA1163 MDAC ORBITER (BODY)

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ○ | 0.038 | 0.000 | 0.103 |
| △ | 0.101 | | |
| ◊ | 0.161 | | |

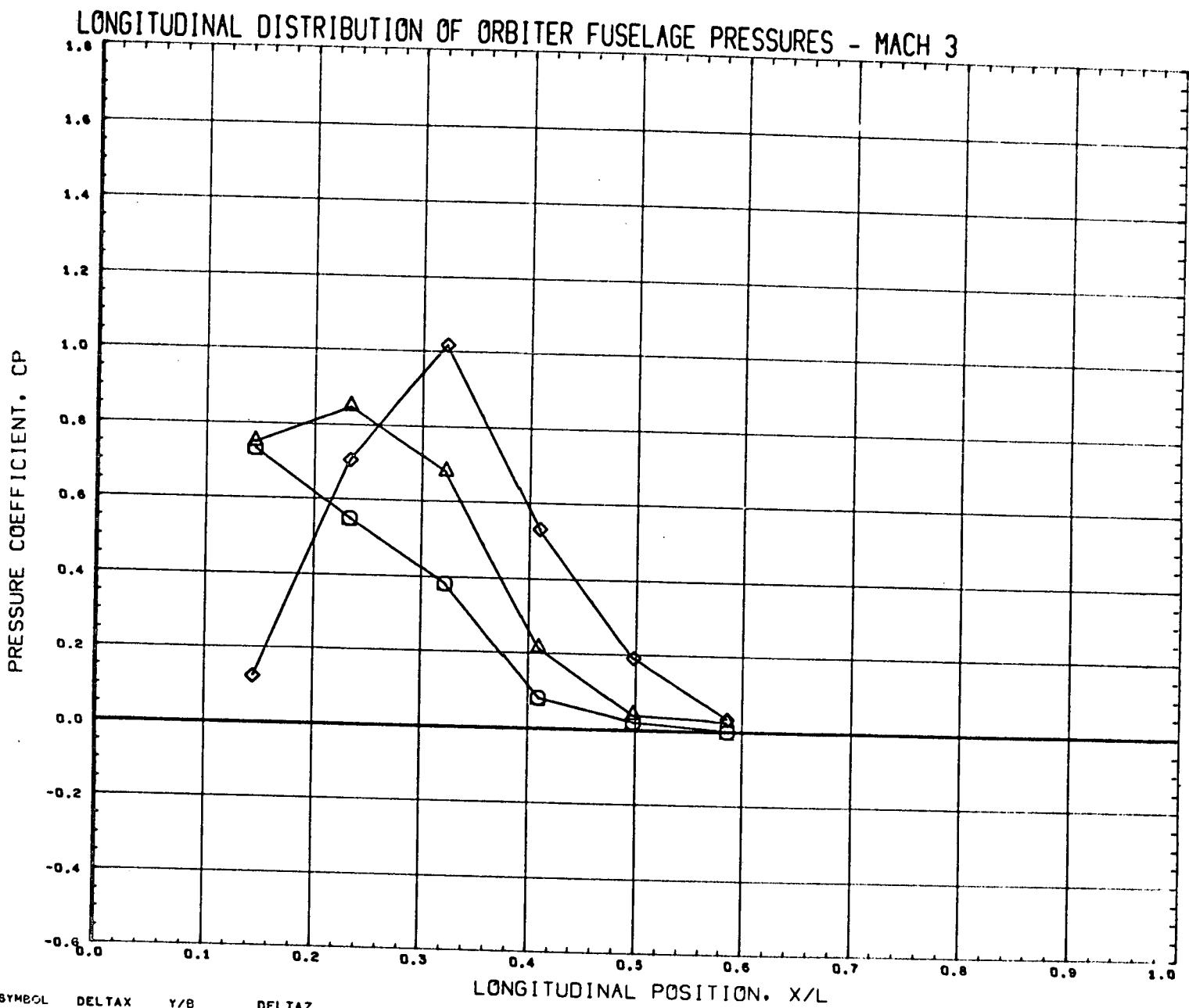
| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|-------|
| ALPHAB | - 4.950 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

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SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|-------|-------|-------|
| ○ | 0.036 | 0.076 | 0.105 |
| △ | 0.101 | - | - |
| ◊ | 0.161 | - | - |

PARAMETRIC VALUES

| | | | | |
|--------|-------|-------|--------|-------|
| ALPHAB | - | 4.950 | MACH | 3.000 |
| ALPHAI | 0.000 | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | - | - | - |

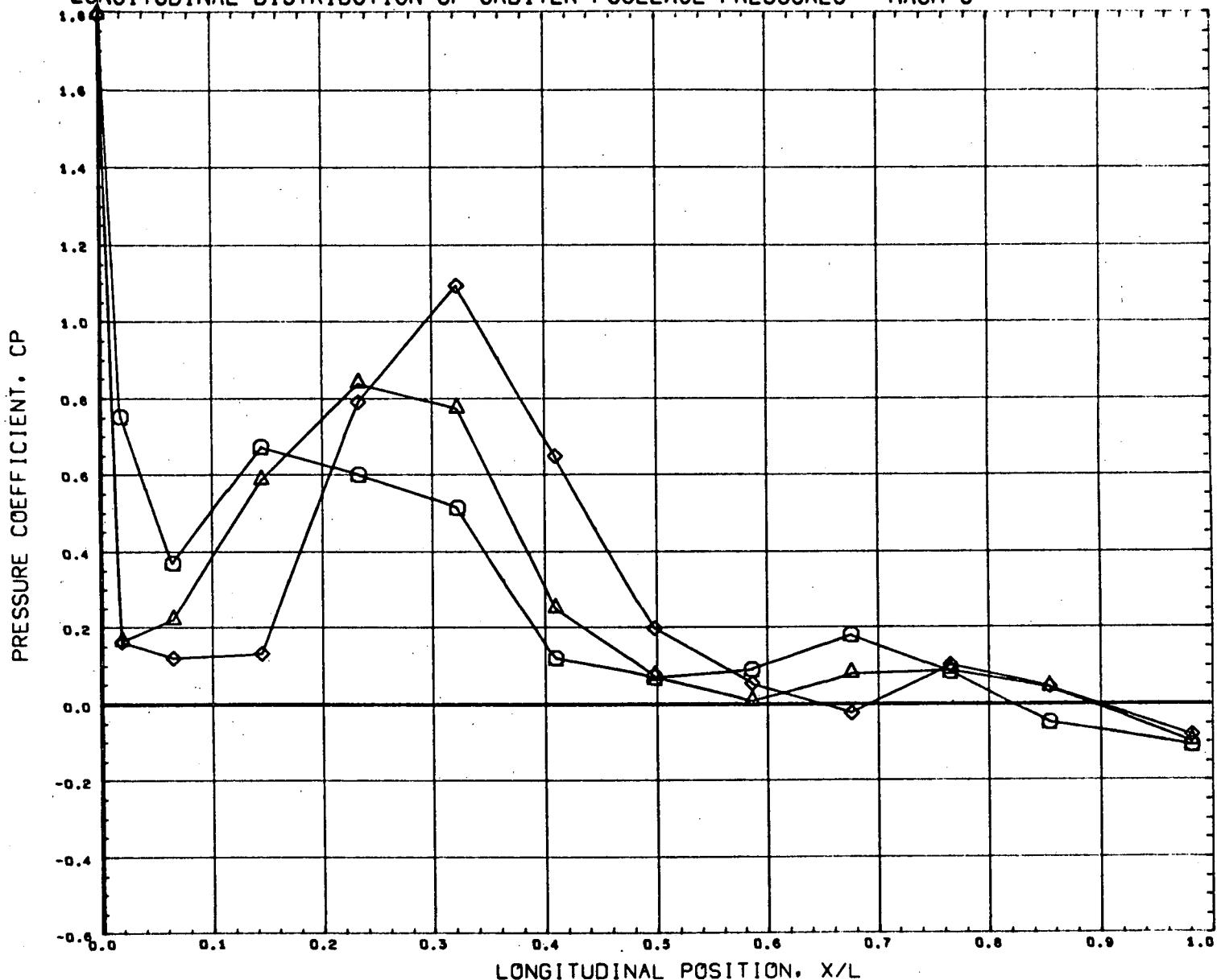
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|-------|-------|-------|
| ○ | 0.040 | 0.000 | 0.105 |
| □ | 0.104 | | |
| △ | 0.167 | | |

PARAMETRIC VALUES

| | | | |
|--------|-------|--------|-------|
| ALPHAB | 0.003 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

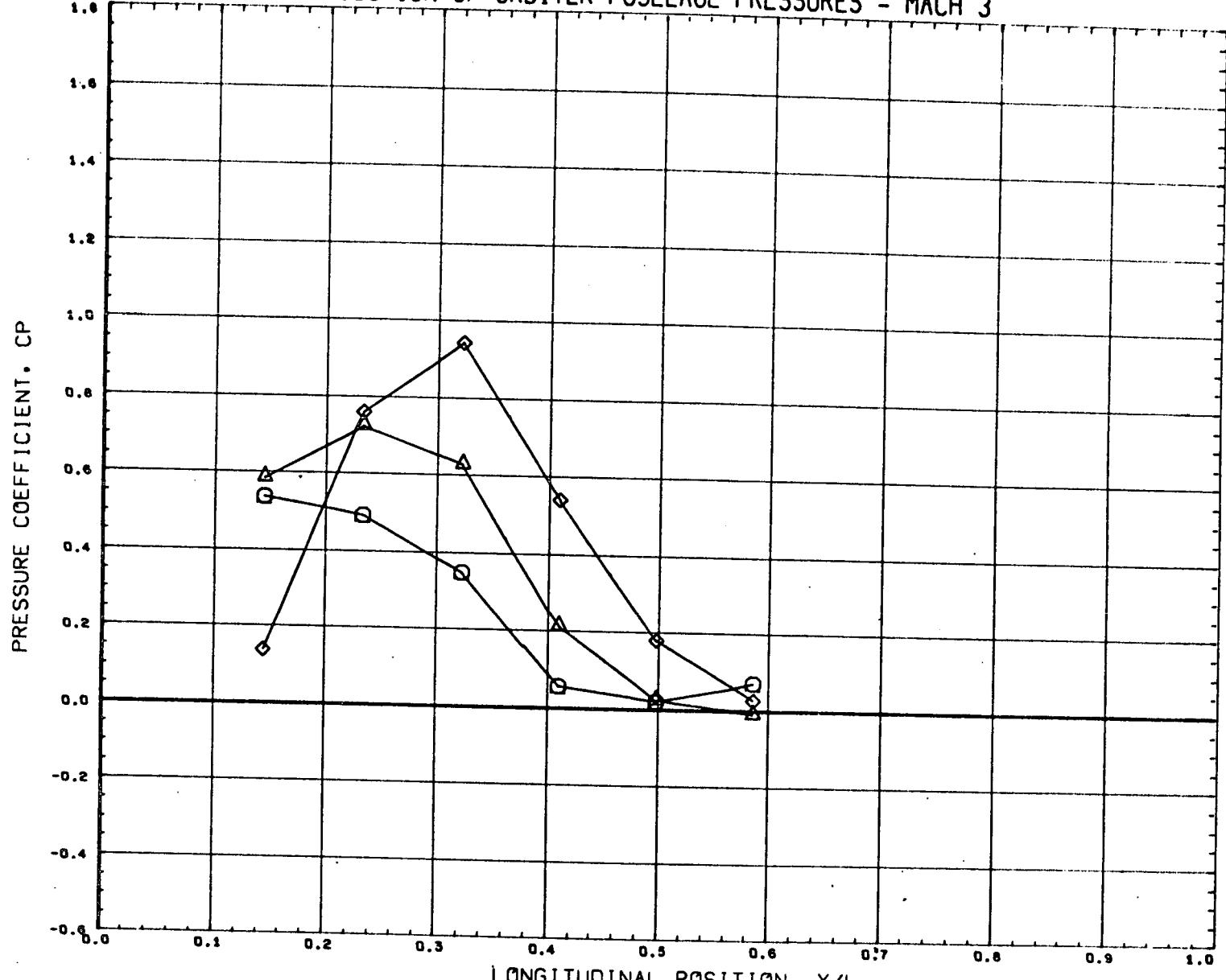
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

•FT8333•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|-------|-------|-------|
| ○ | 0.040 | 0.076 | 0.105 |
| △ | 0.104 | | |
| ◊ | 0.167 | | |

PARAMETRIC VALUES

| | | | |
|--------|-------|--------|-------|
| ALPHAB | 0.003 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

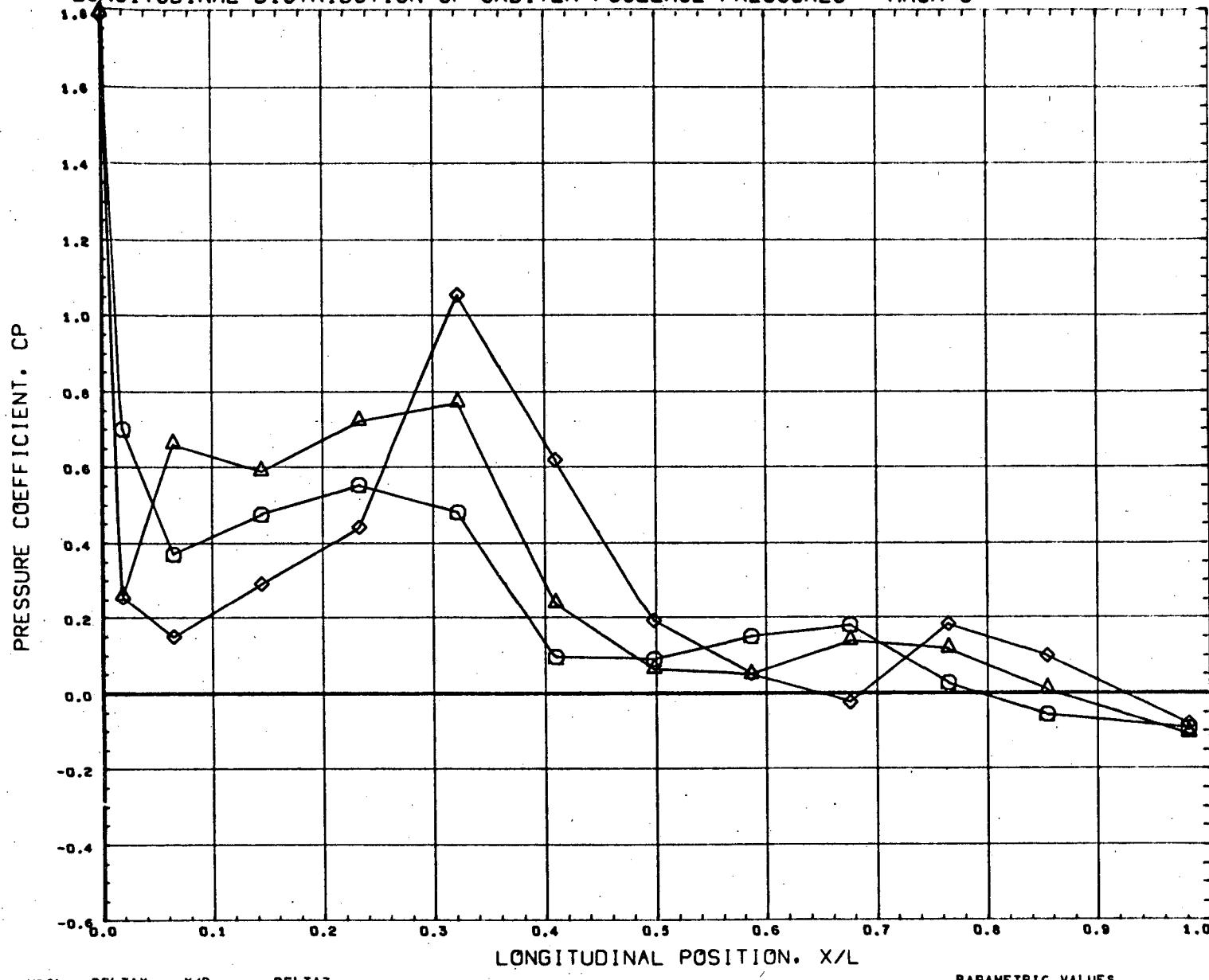
REFERENCE FILE

AEDC VA1163 MOAC ORBITER (BODY)

•FT8333•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|-------|-------|-------|
| ○ | 0.038 | 0.000 | 0.105 |
| △ | 0.099 | | |
| ◊ | 0.162 | | |

PARAMETRIC VALUES

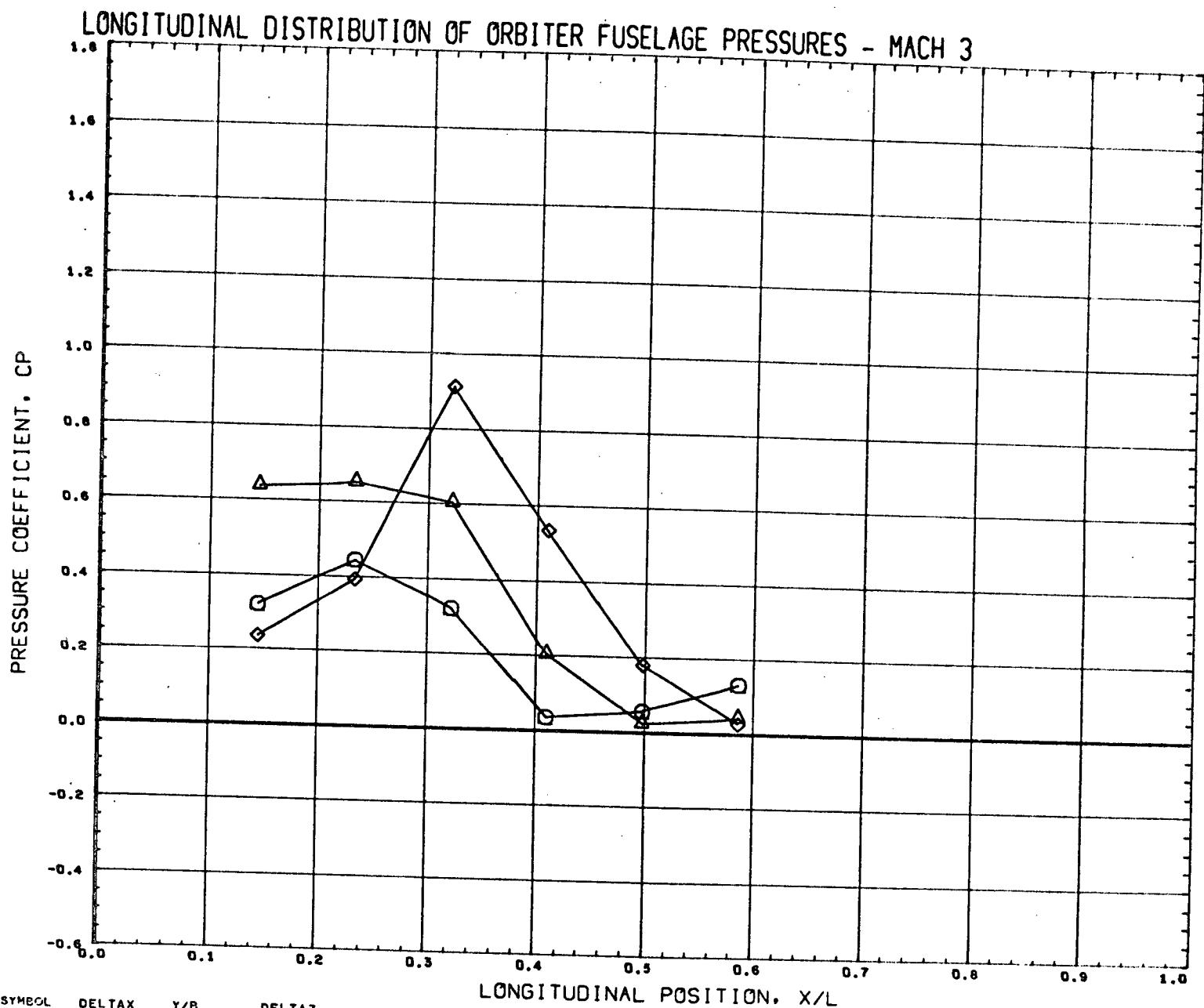
| | | | |
|--------|-------|--------|-------|
| ALPHAB | 5.040 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

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SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|-------|-------|-------|
| △ | 0.038 | 0.076 | 0.105 |
| □ | 0.099 | | |
| ◇ | 0.162 | | |

PARAMETRIC VALUES

| | | | |
|--------|-------|--------|-------|
| ALPHAB | 5.040 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | | | |

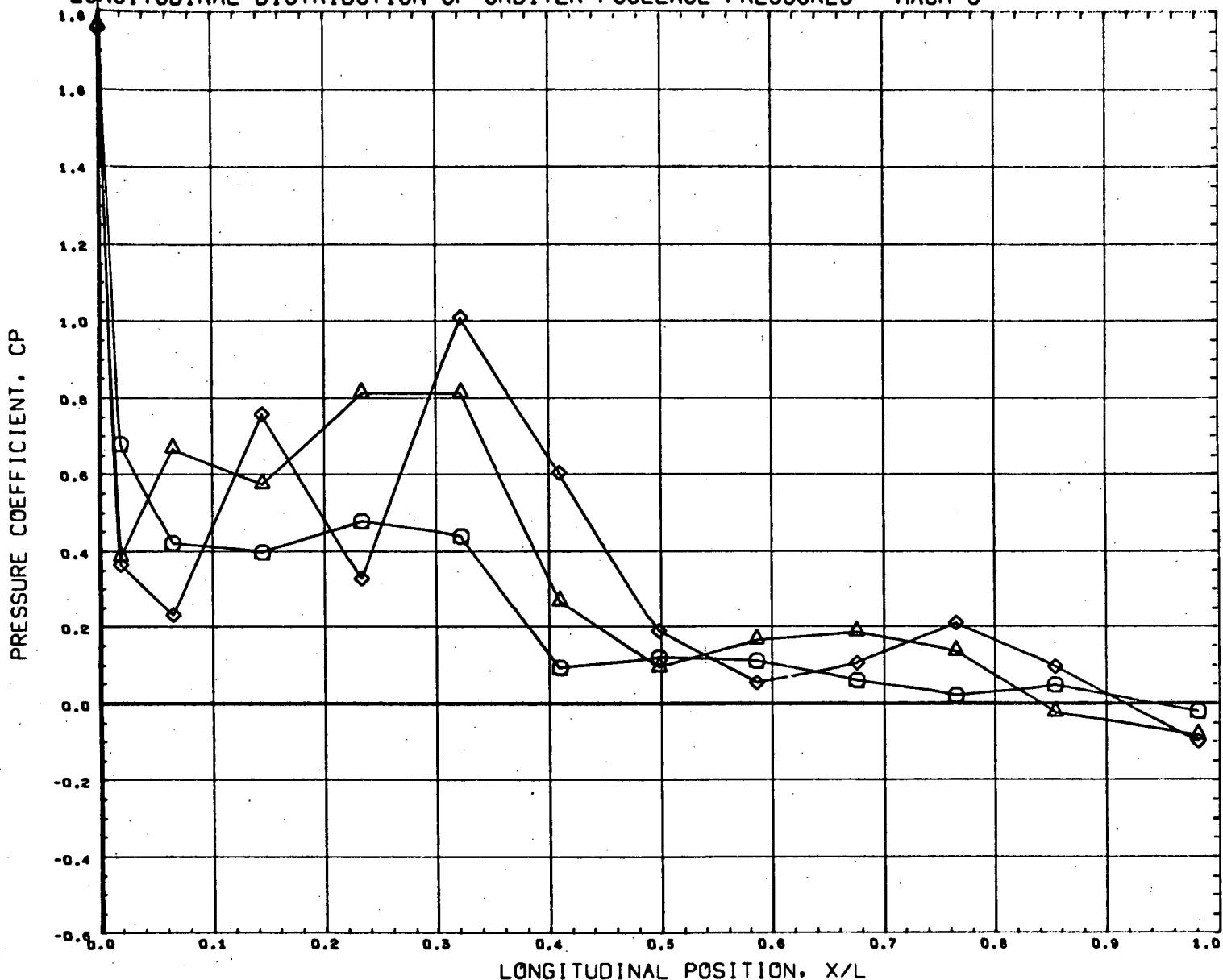
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

•FT8334•

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O 0.042 0.000 0.105
 △ 0.104 0.000 0.105
 ◇ 0.165 0.000 0.105

PARAMETRIC VALUES
 ALPHAB 10.000 MACH 3.000
 ALPHAT 0.000 ORBPOW 0.000
 BSTPOW 0.000

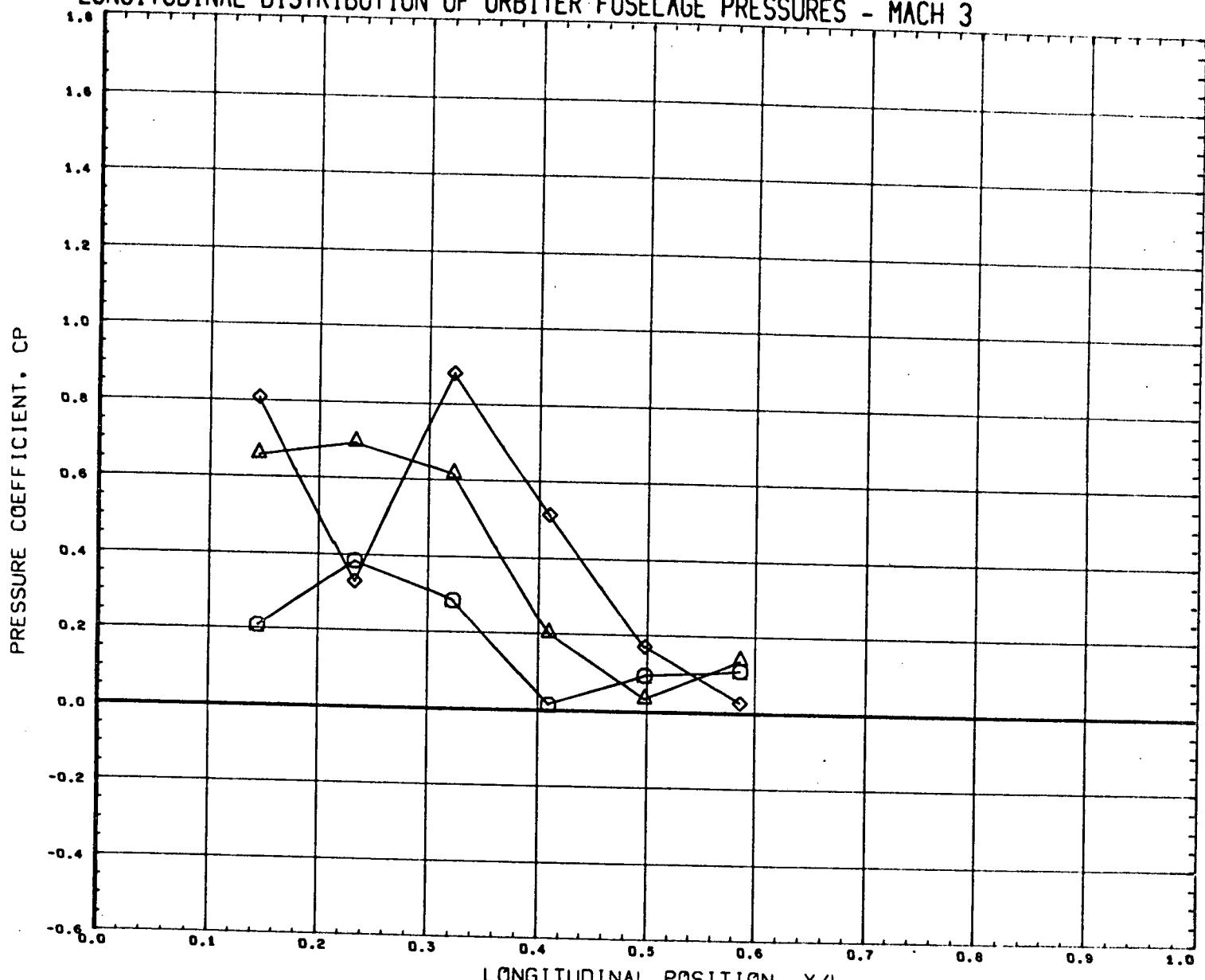
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

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LONGITUDINAL DISTRIBUTION OF ORBITER FUSELAGE PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|-------|-------|-------|
| ○ | 0.042 | 0.076 | 0.105 |
| △ | 0.104 | | |
| ◊ | 0.165 | | |

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|-------|
| ALPHAB | 10.000 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

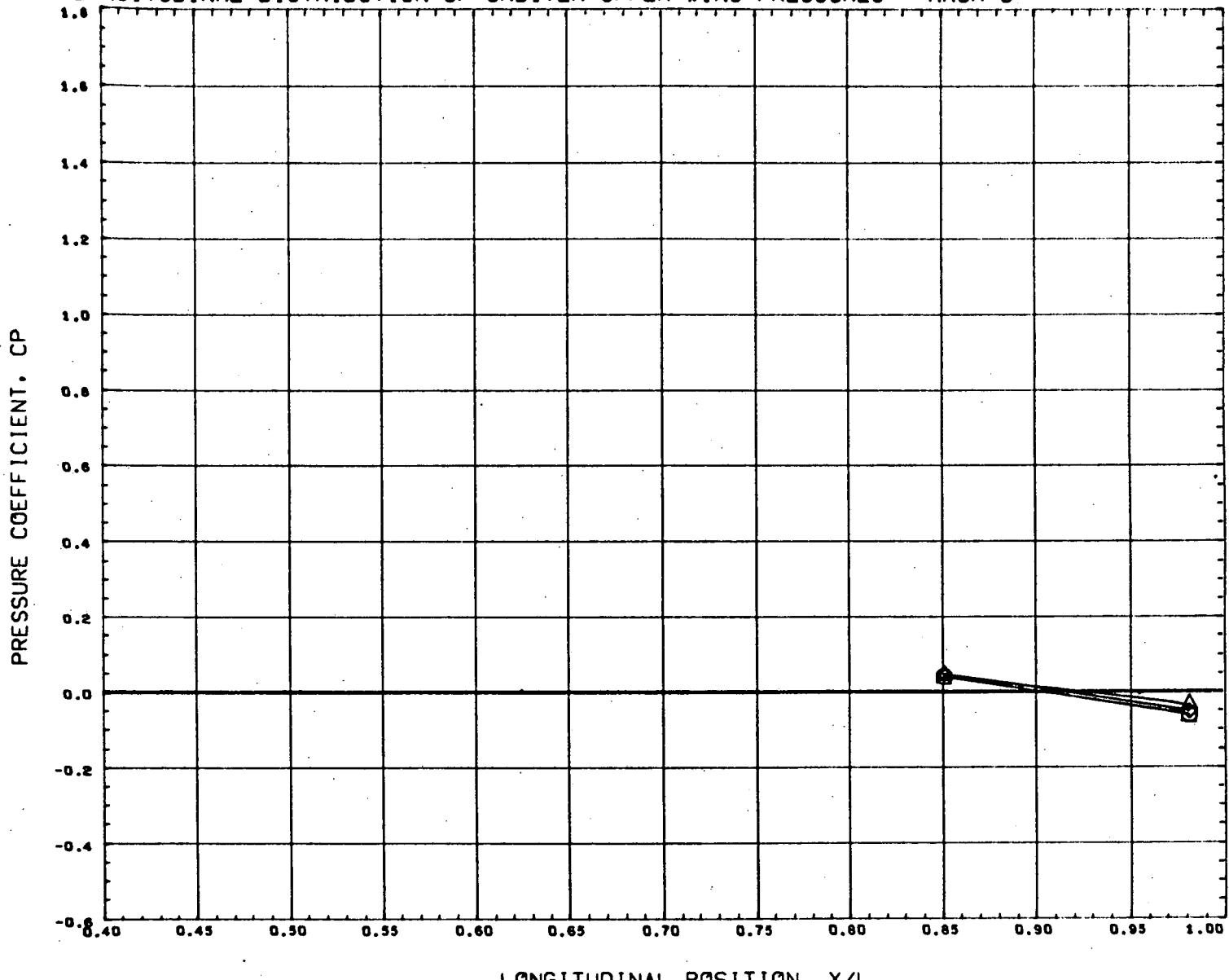
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BODY)

•FT8335•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 0.289 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|---------|
| ALPHAB | - 9.979 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

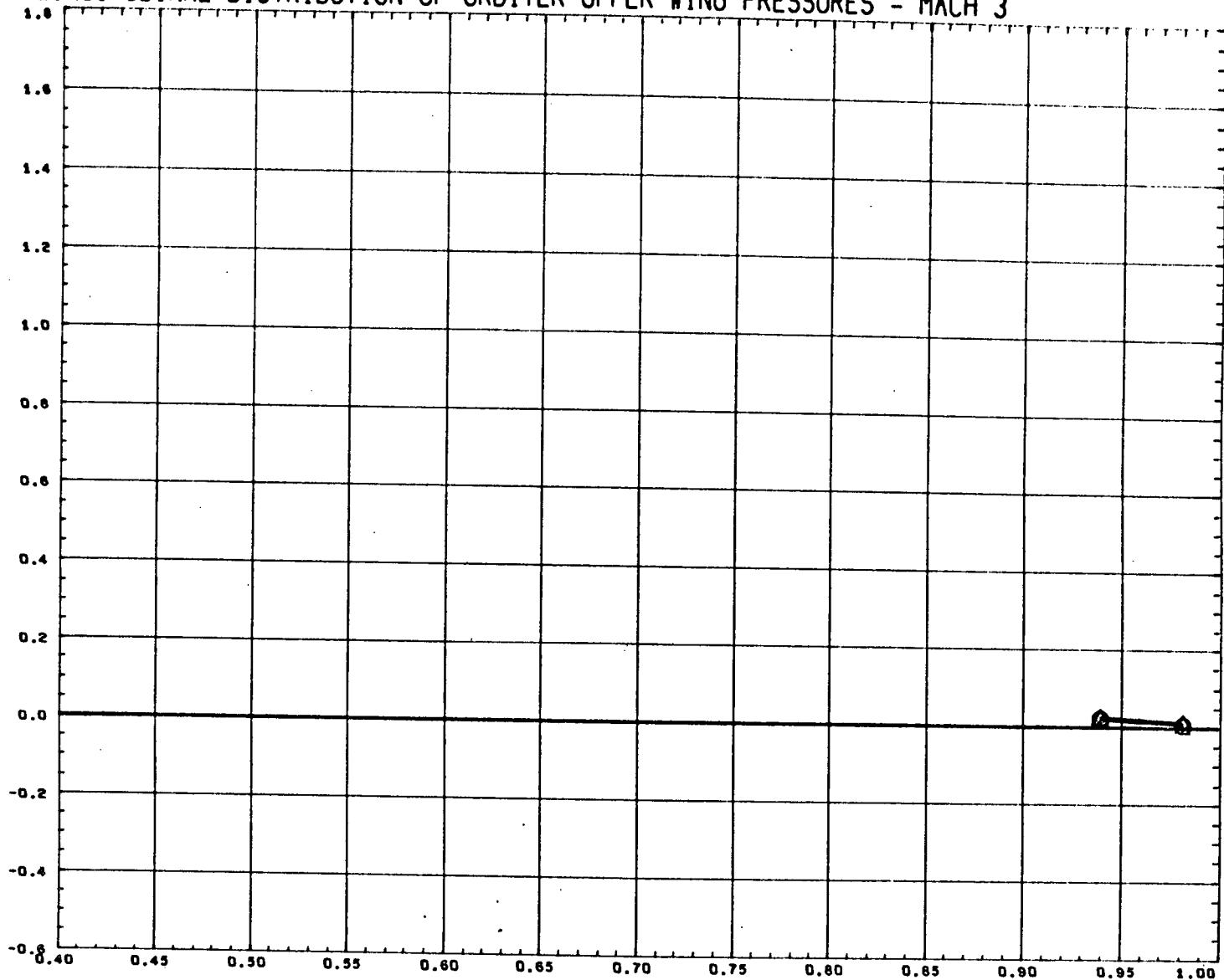
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8311•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.143 | 0.399 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.228 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 9.979 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

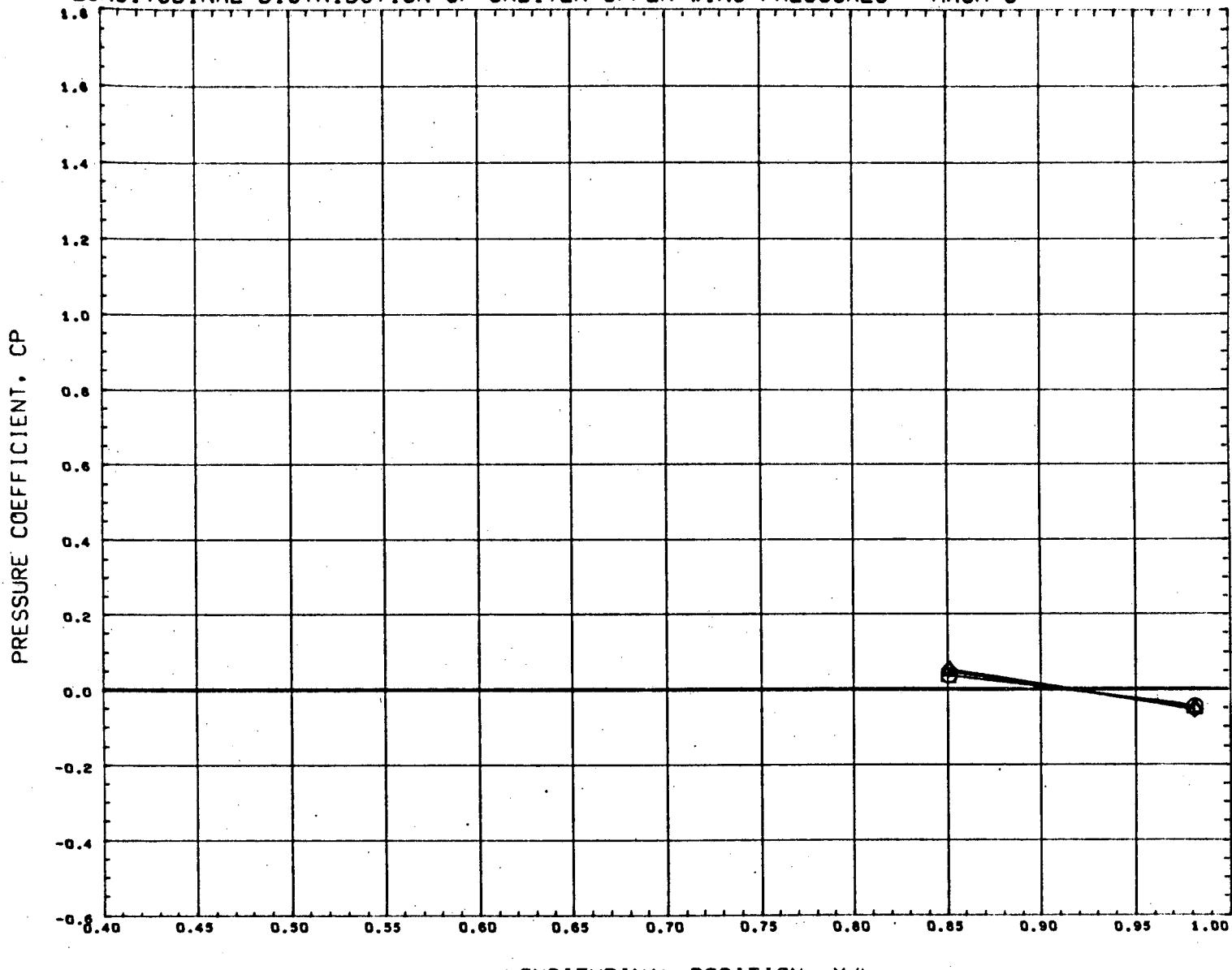
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8311•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| O | - 0.143 | 0.269 | 0.151 |
| △ | 0.104 | | |
| ◊ | 0.226 | | |

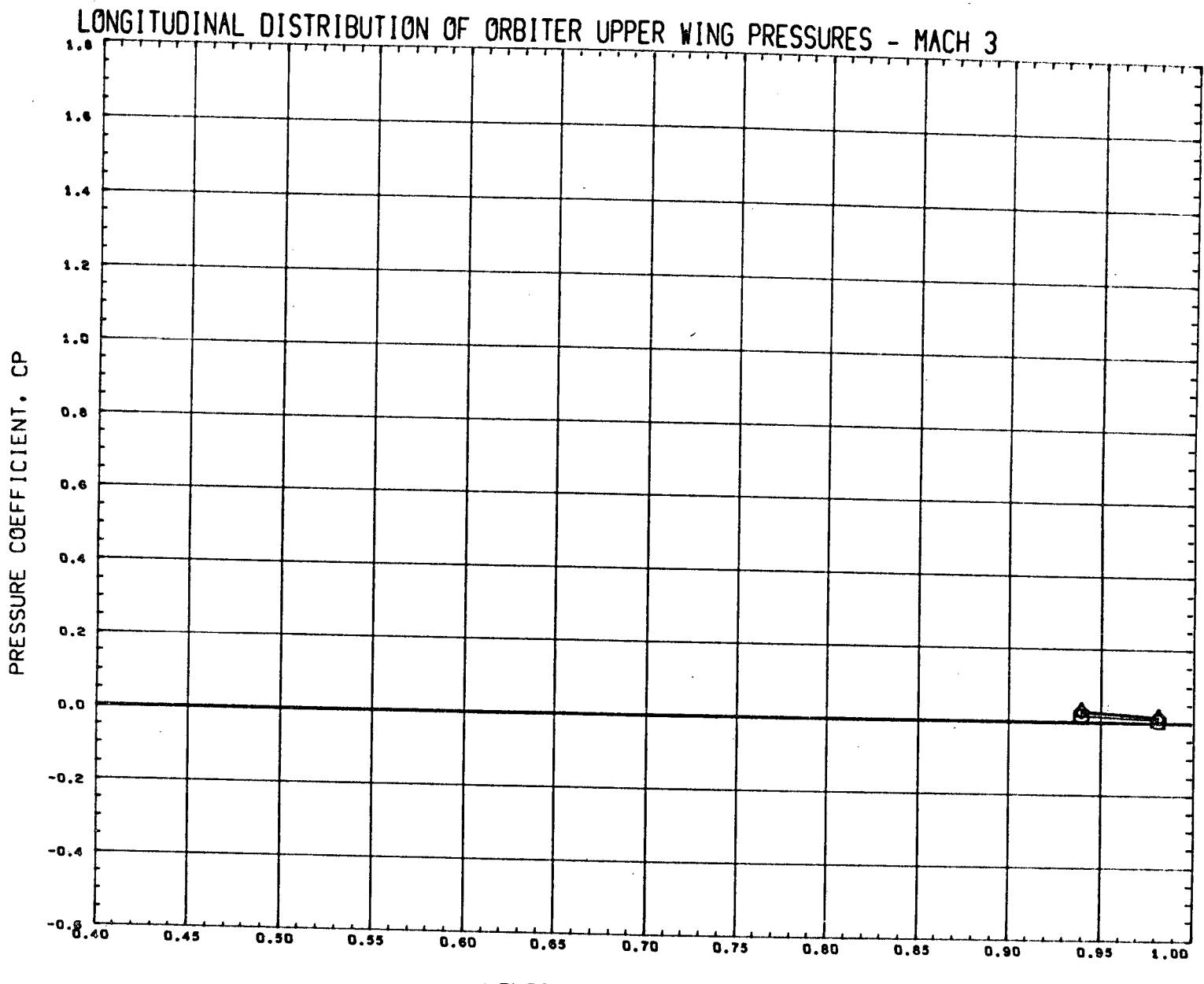
| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 9.979 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8311•

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SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| △ | - 0.143 | 0.399 | 0.151 |
| | 0.104 | | |
| ◊ | 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|---------|
| ALPHAB | - 9.979 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

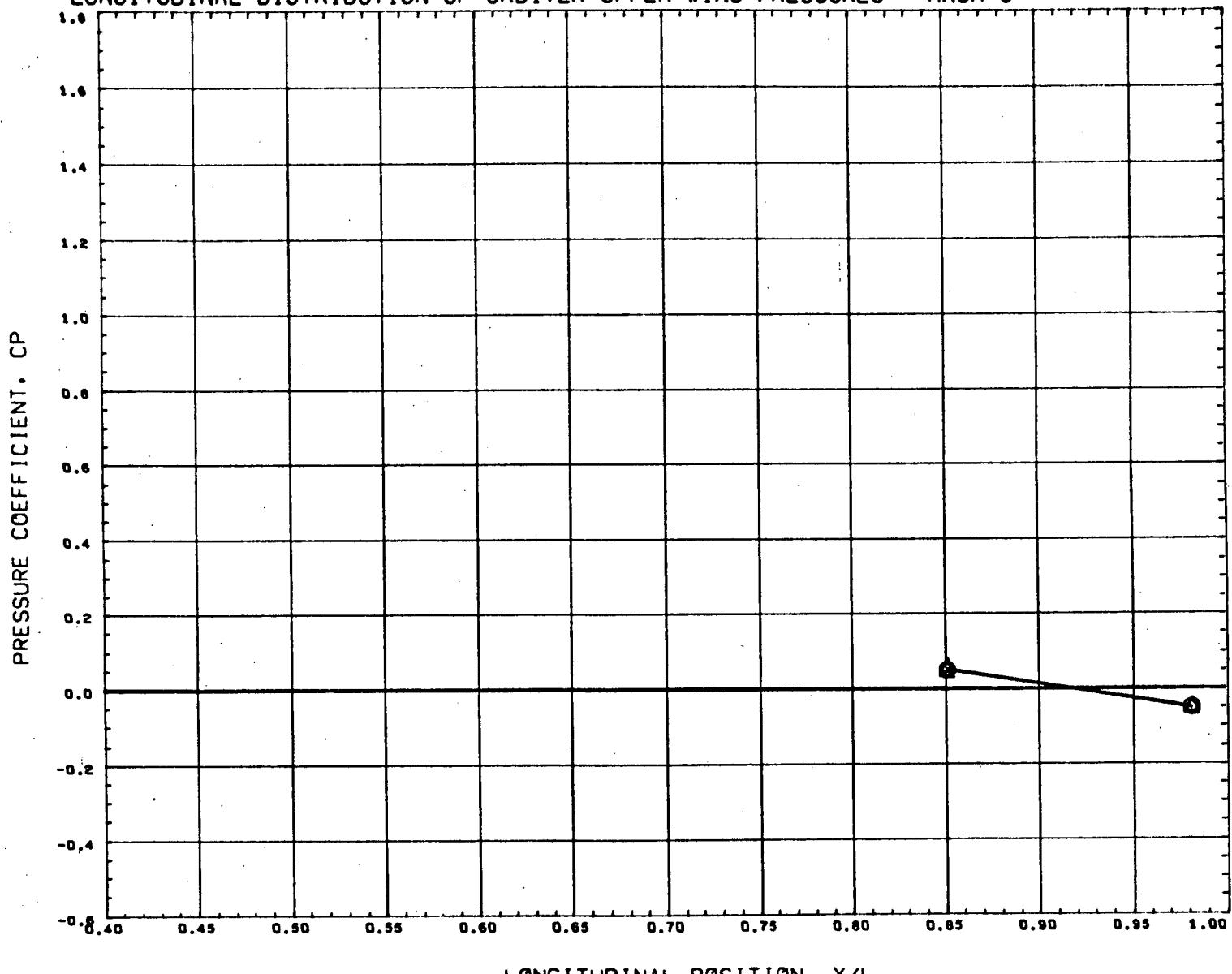
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8311•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



REFERENCE FILE

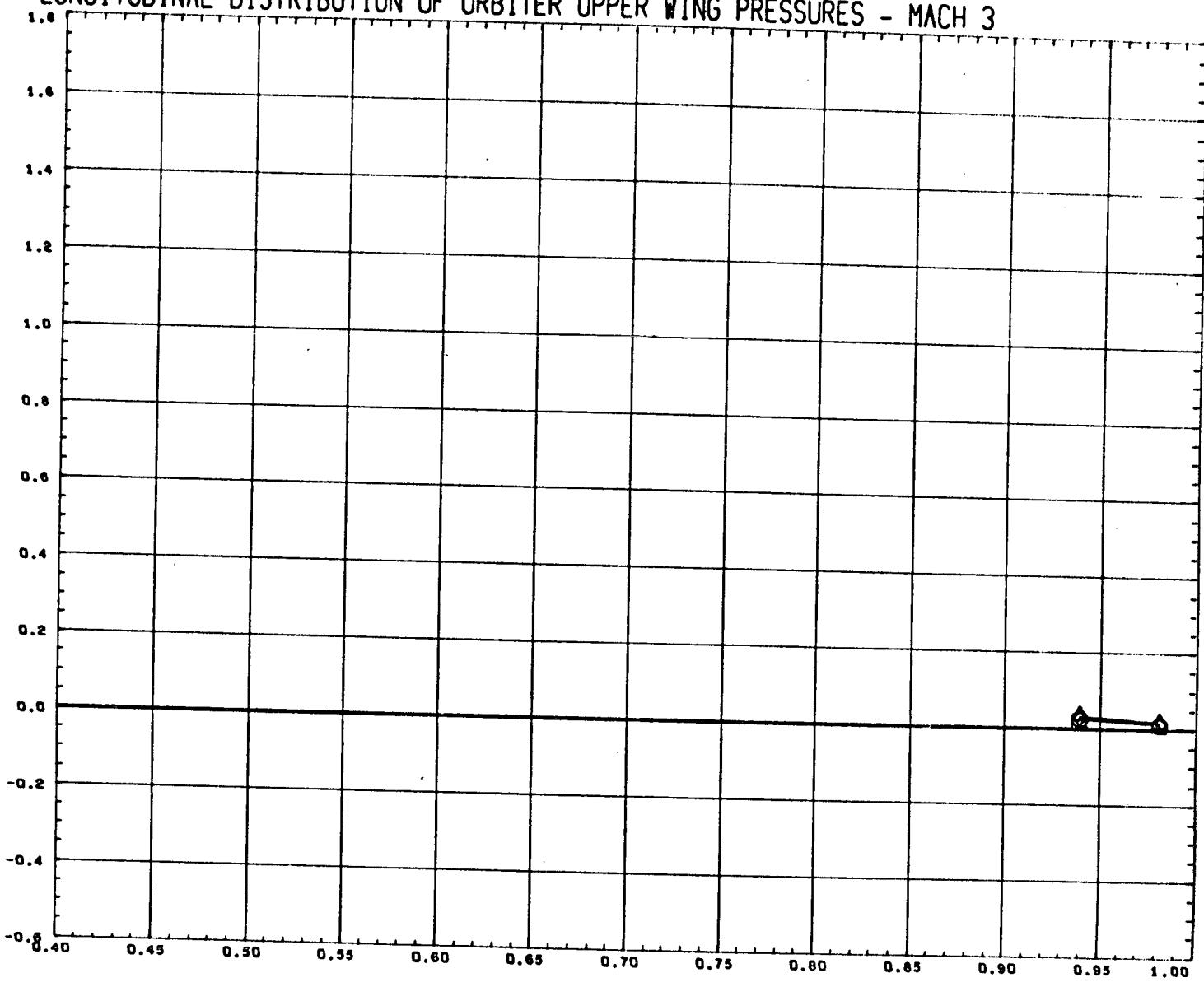
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8311•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.143 | 0.399 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 9.979 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

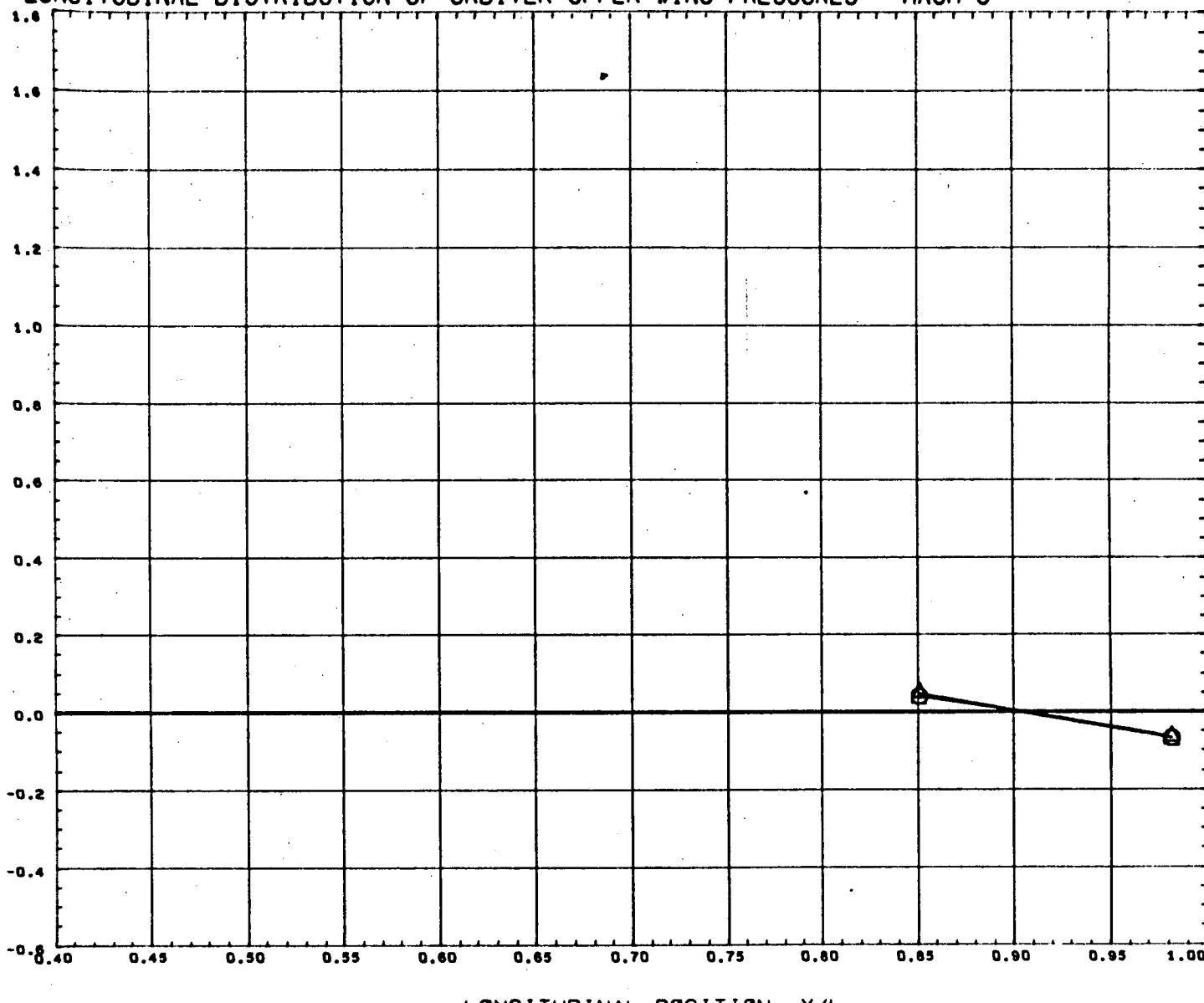
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8311•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

SYMBOL DELTAX Y/B DELTAZ
○ - 0.390 0.289 0.908
△ 0.480

| PARAMETRIC VALUES | | |
|-------------------|---------|----------------|
| ALPHAB | = 9.979 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

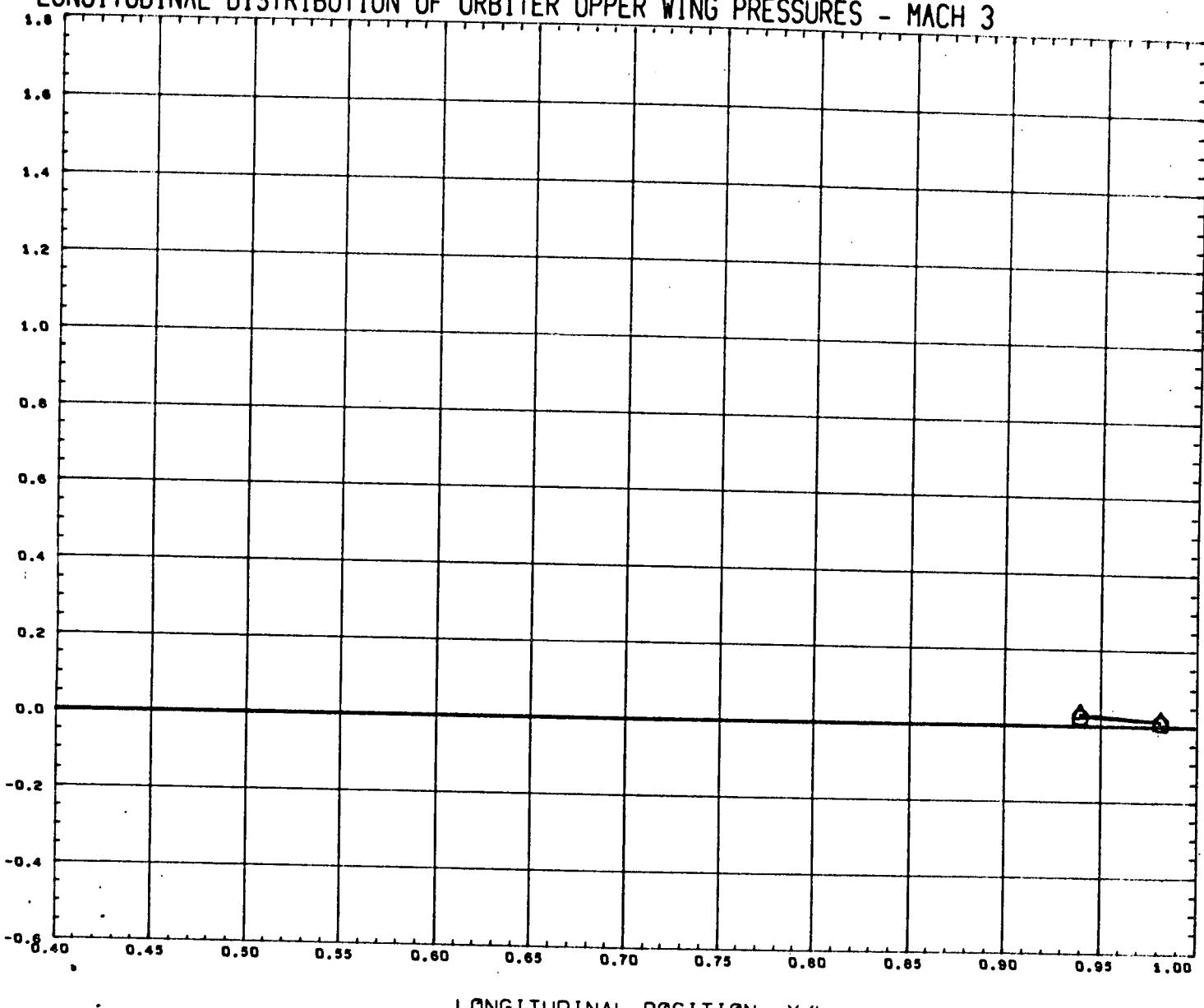
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8311•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

SYMBOL DELTAX Y/B DELTAZ
 ○ - 0.390 0.399 0.908
 △ - 0.480

PARAMETRIC VALUES
 ALPHAB - 9.979 MACH 3.000
 ALPHAT 0.000 ORBPOW 100.000
 BSTPOW 50.000

REFERENCE FILE

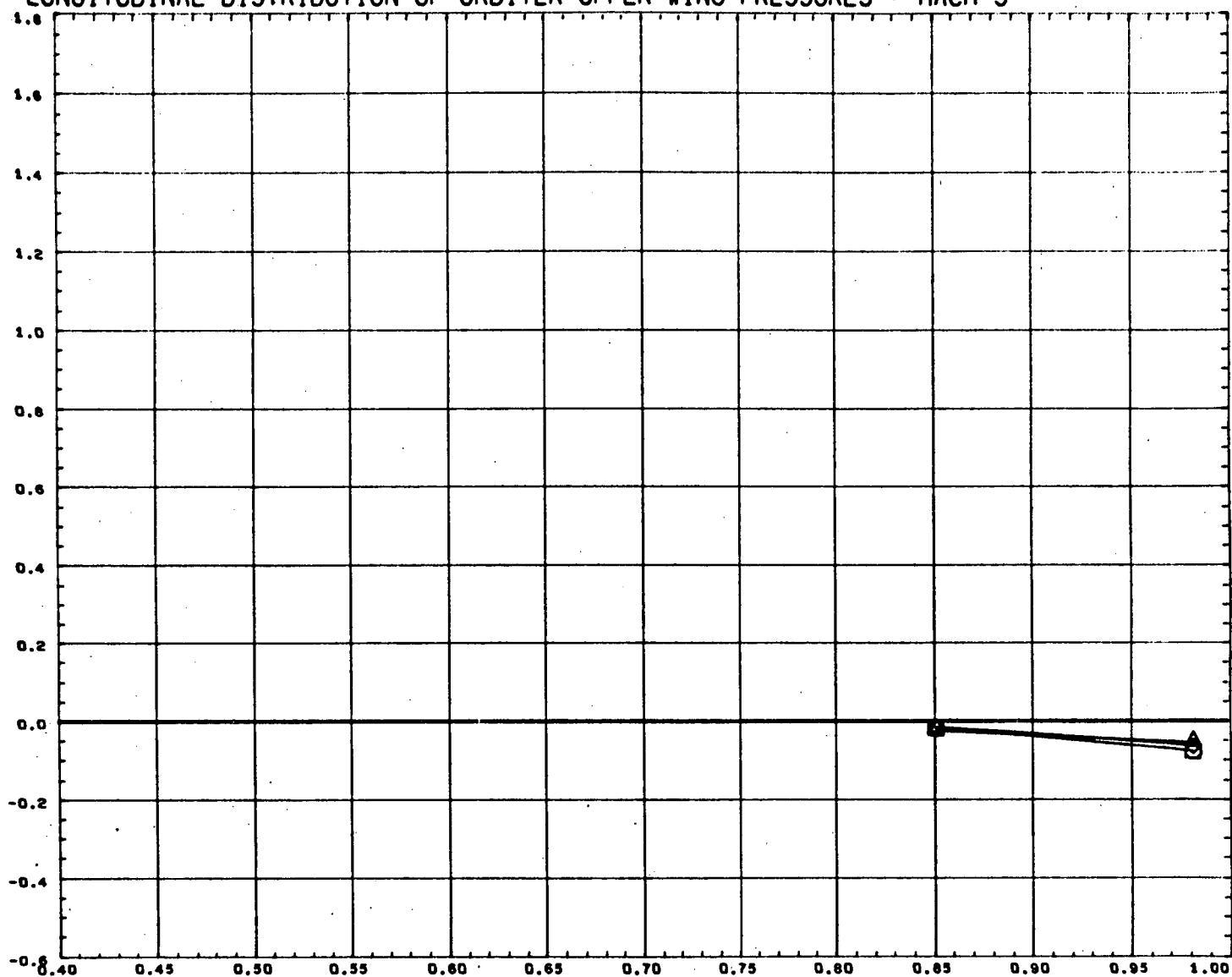
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8311•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DETAZ |
|--------|---------|-------|-------|
| ○ | - 0.143 | 0.289 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.228 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 4.945 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

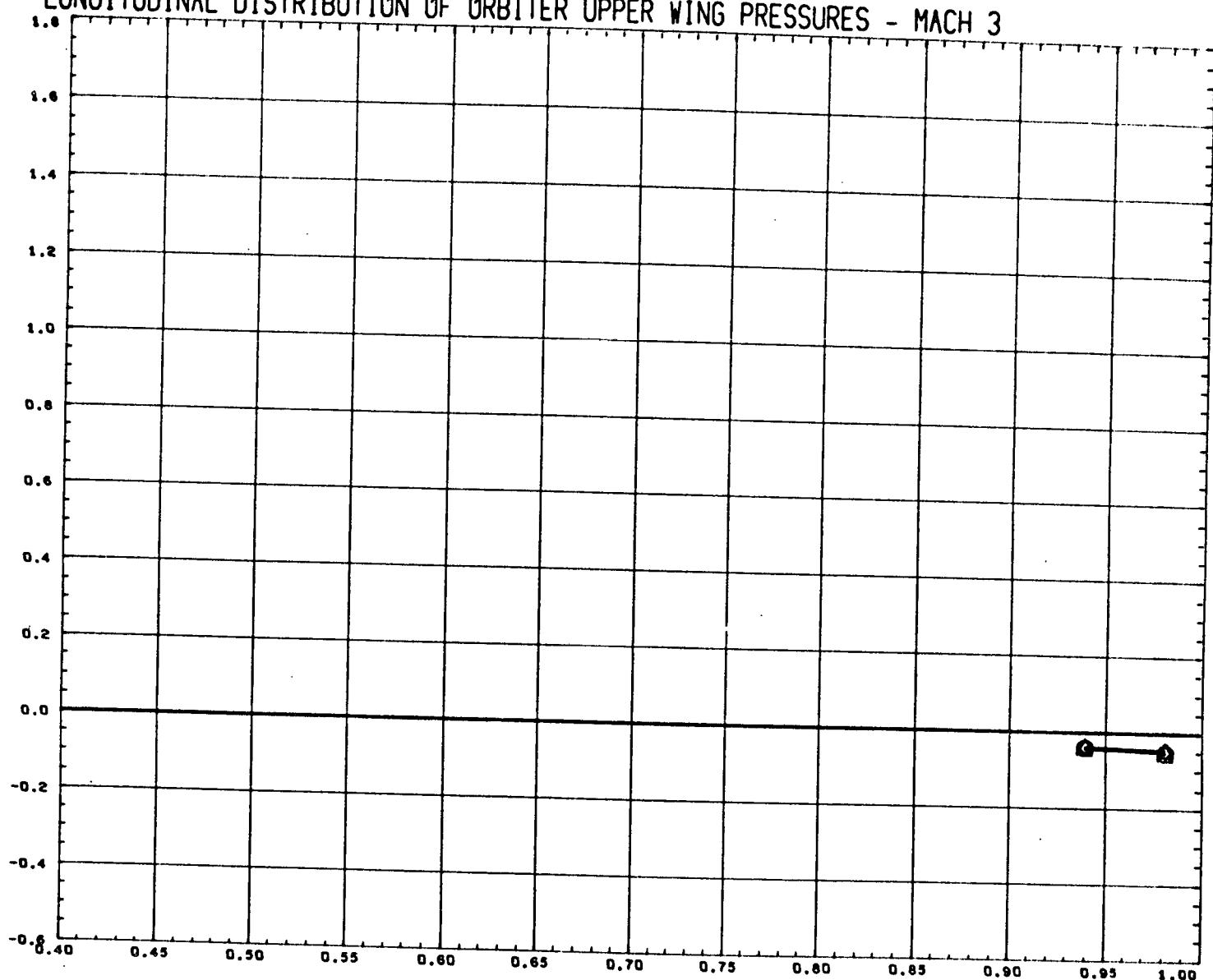
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8312•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

△ - 0.143 0.399 0.120

○ 0.103

◊ 0.228

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 4.945 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

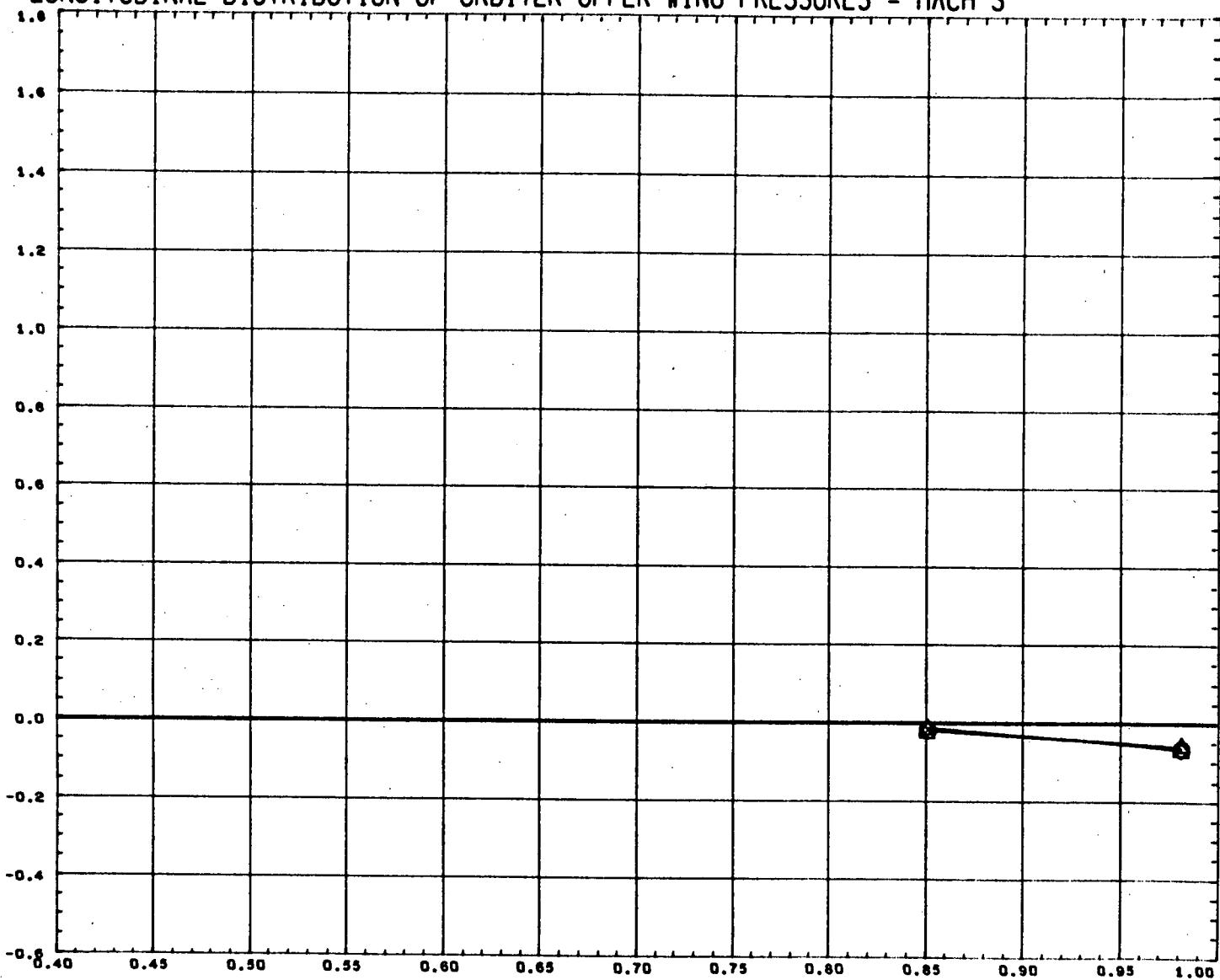
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8312•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| O | - 0.143 | 0.289 | 0.151 |
| X | 0.103 | | |
| D | 0.227 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 4.945 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| B8TPOW | 50.000 | | |

REFERENCE FILE

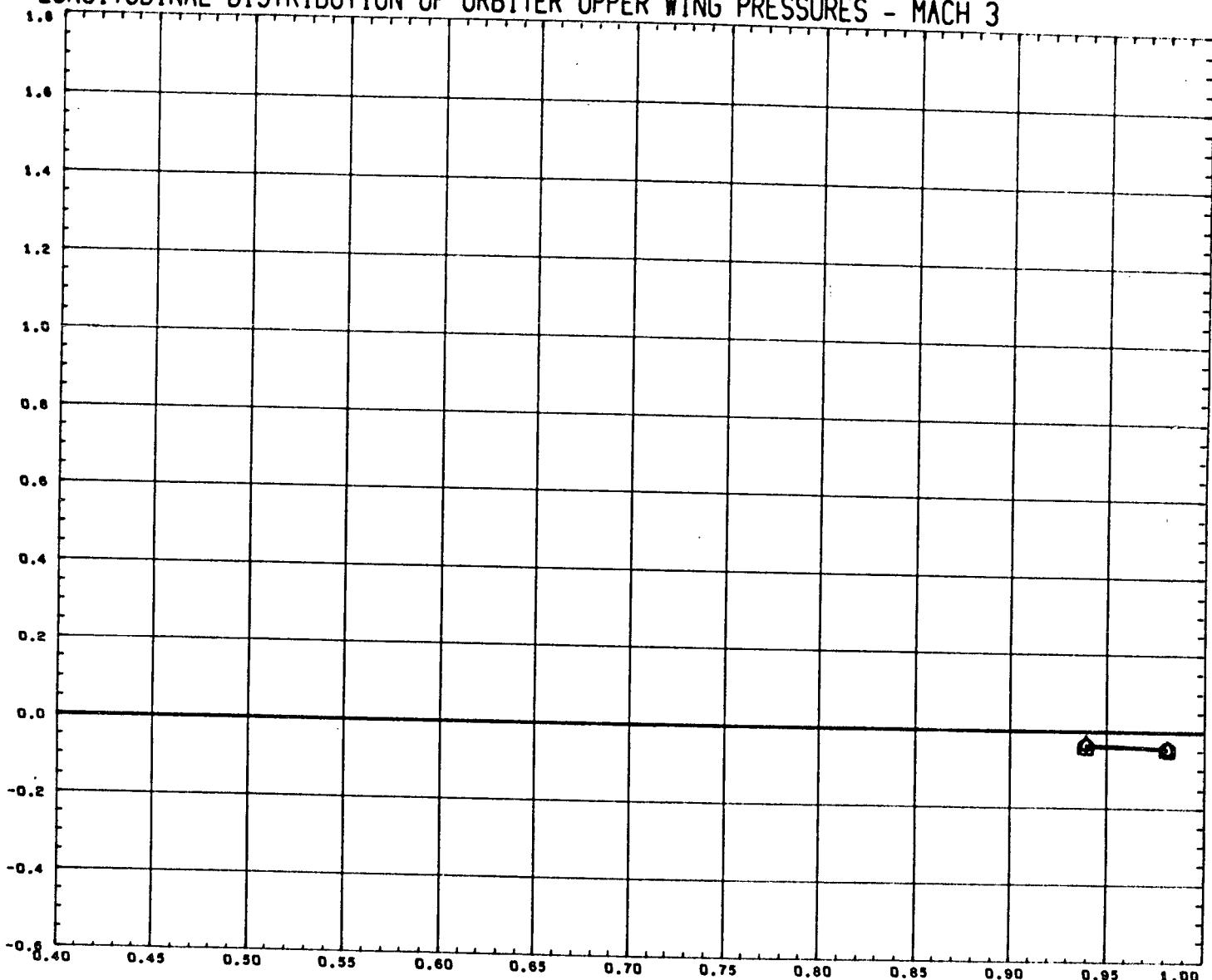
AEDC VA1163 MDAC ORBITER (UPPER WING)

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 0.399 | 0.151 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 4.945 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

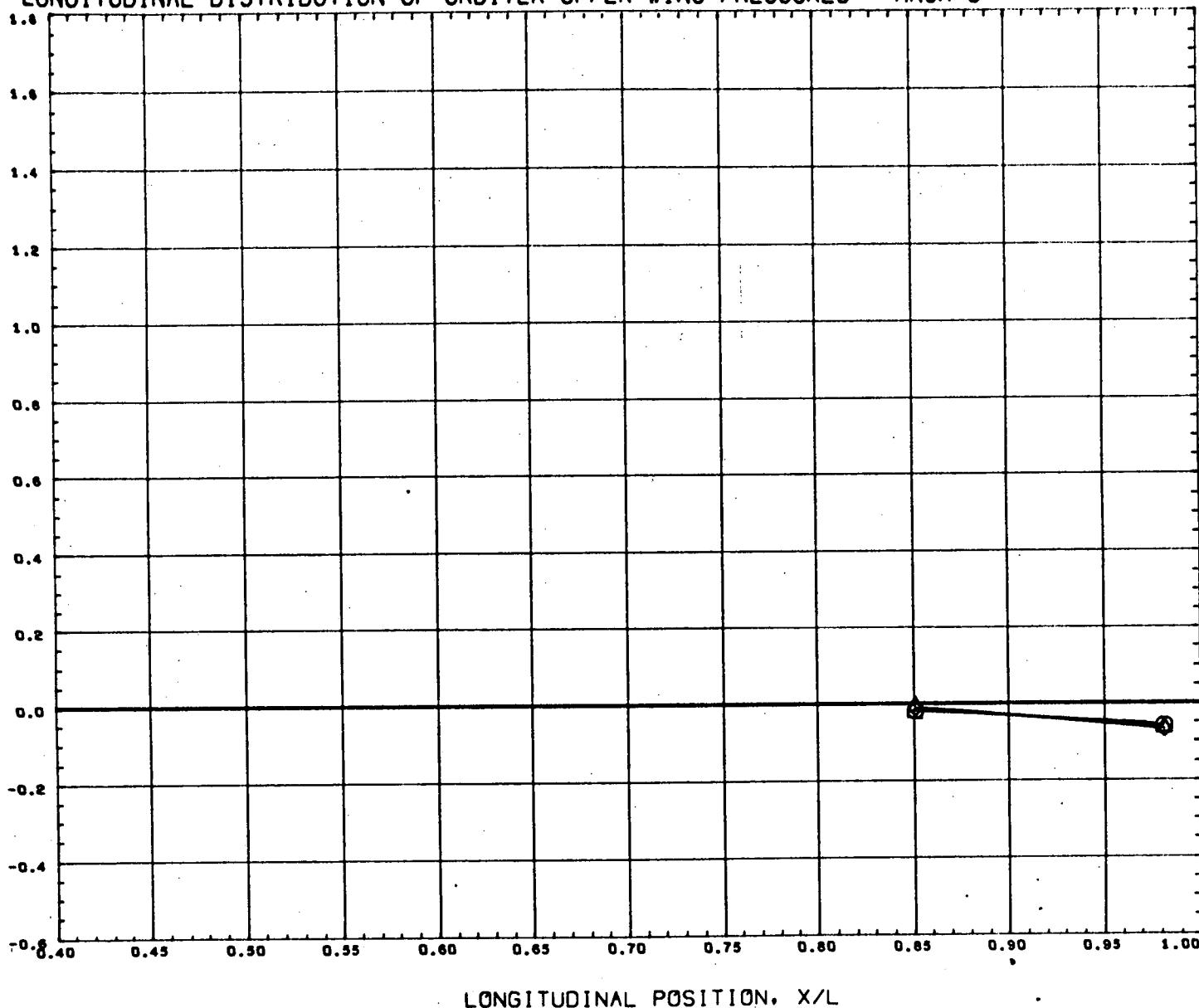
AEDC VA1163 MDAC ORBITER (UPPER WING)

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.143 | 0.289 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 4.945 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

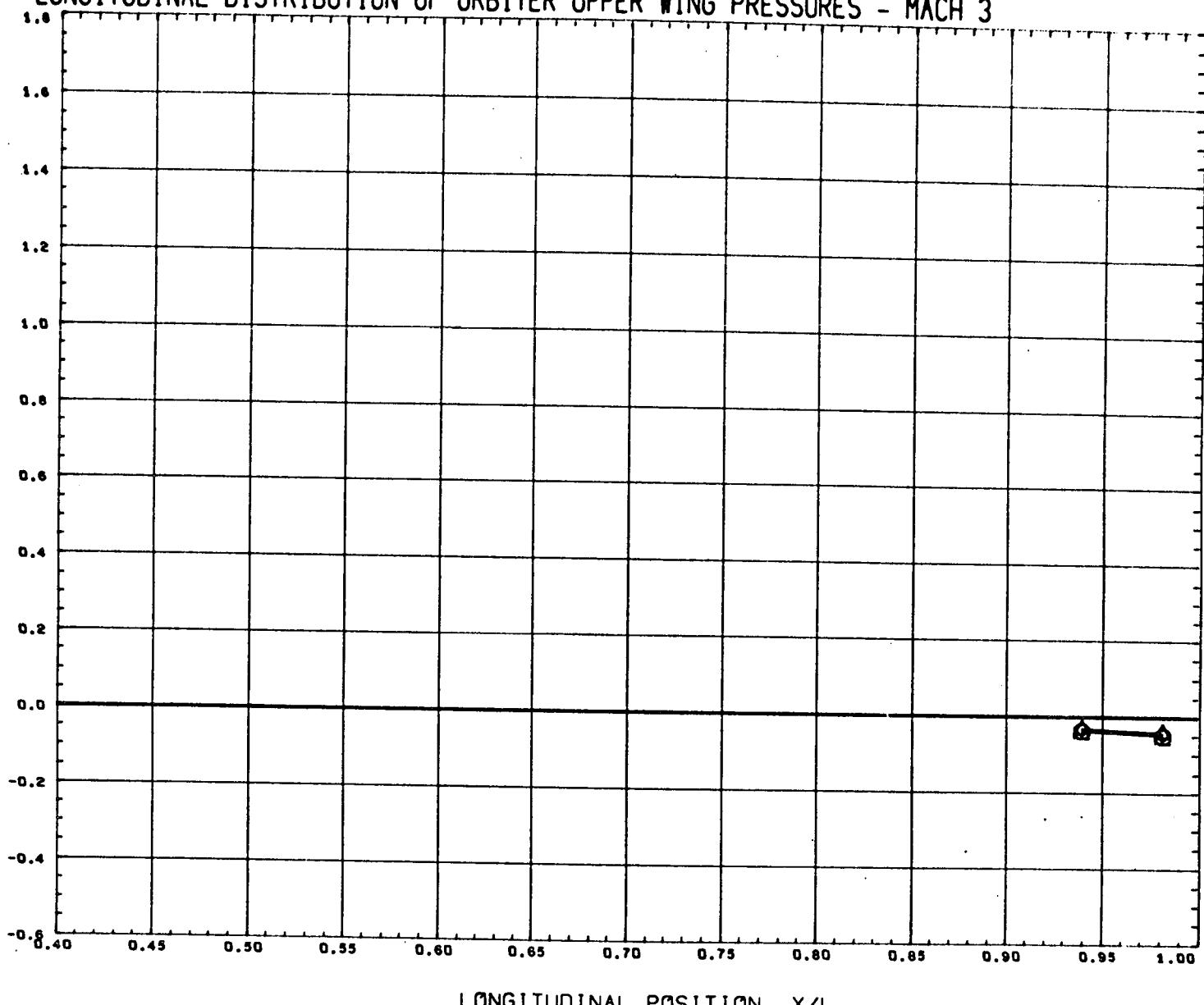
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8312•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|---------------------------|---------|-------|--------|
| $\Delta\circlearrowleft$ | - 0.143 | 0.399 | 0.228 |
| $\Delta\circlearrowright$ | 0.103 | | |
| \diamond | 0.226 | | |

| PARAMETRIC VALUES | |
|-------------------|---------|
| ALPHAB | - 4.945 |
| ALPHAI | 0.000 |
| BSTPOW | 50.000 |
| MACH | 3.000 |
| ORBPOW | 100.000 |

REFERENCE FILE

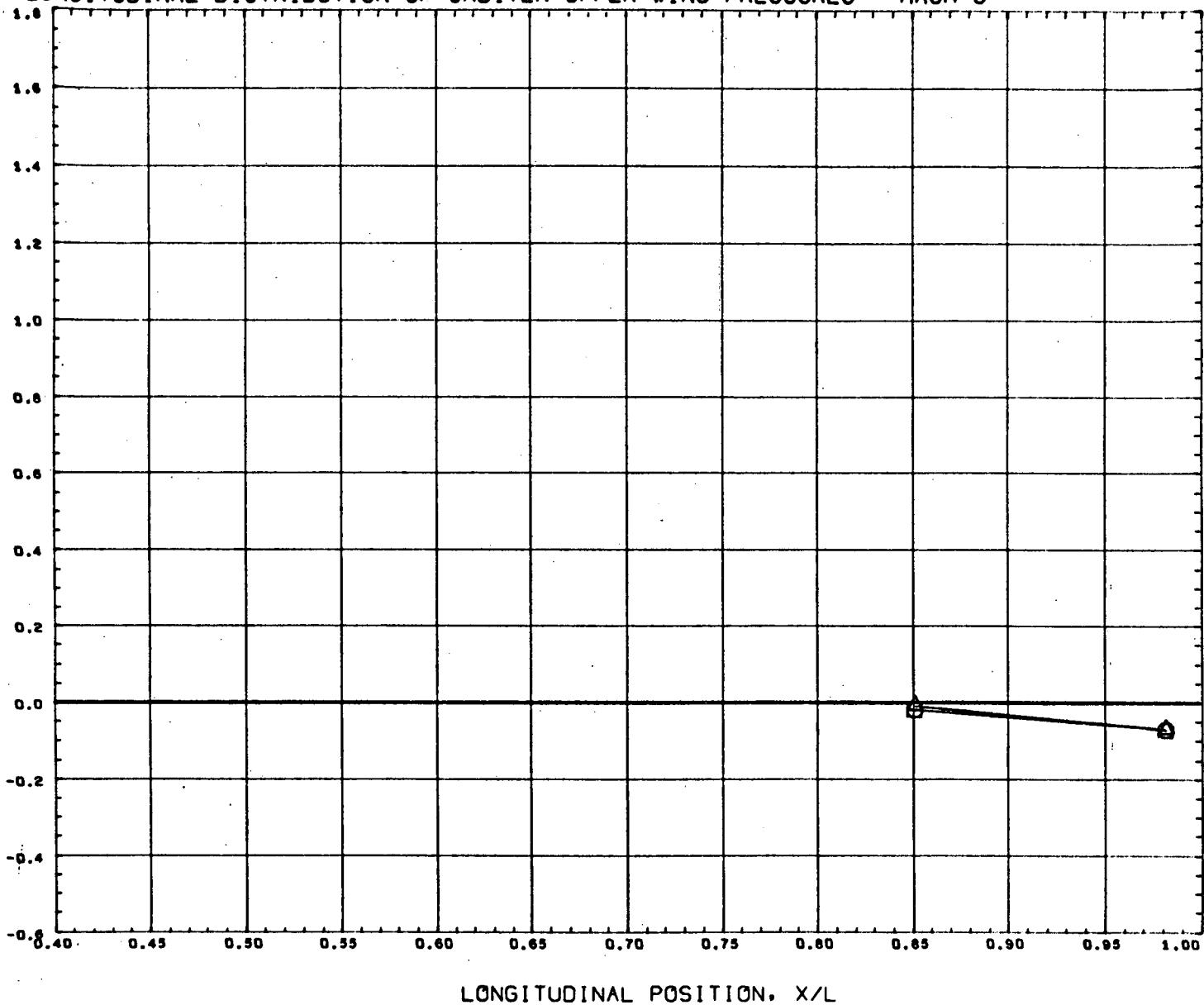
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8312•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ○ | 0.390 | 0.269 | 0.908 |
| △ | 0.478 | | |

| PARAMETRIC VALUES | | |
|-------------------|---|---------|
| ALPHAB | - | 4.945 |
| ALPHAI | - | 0.000 |
| BSTPOW | - | 50.000 |
| MACH | - | 3.000 |
| ORBPOW | - | 100.000 |

REFERENCE FILE

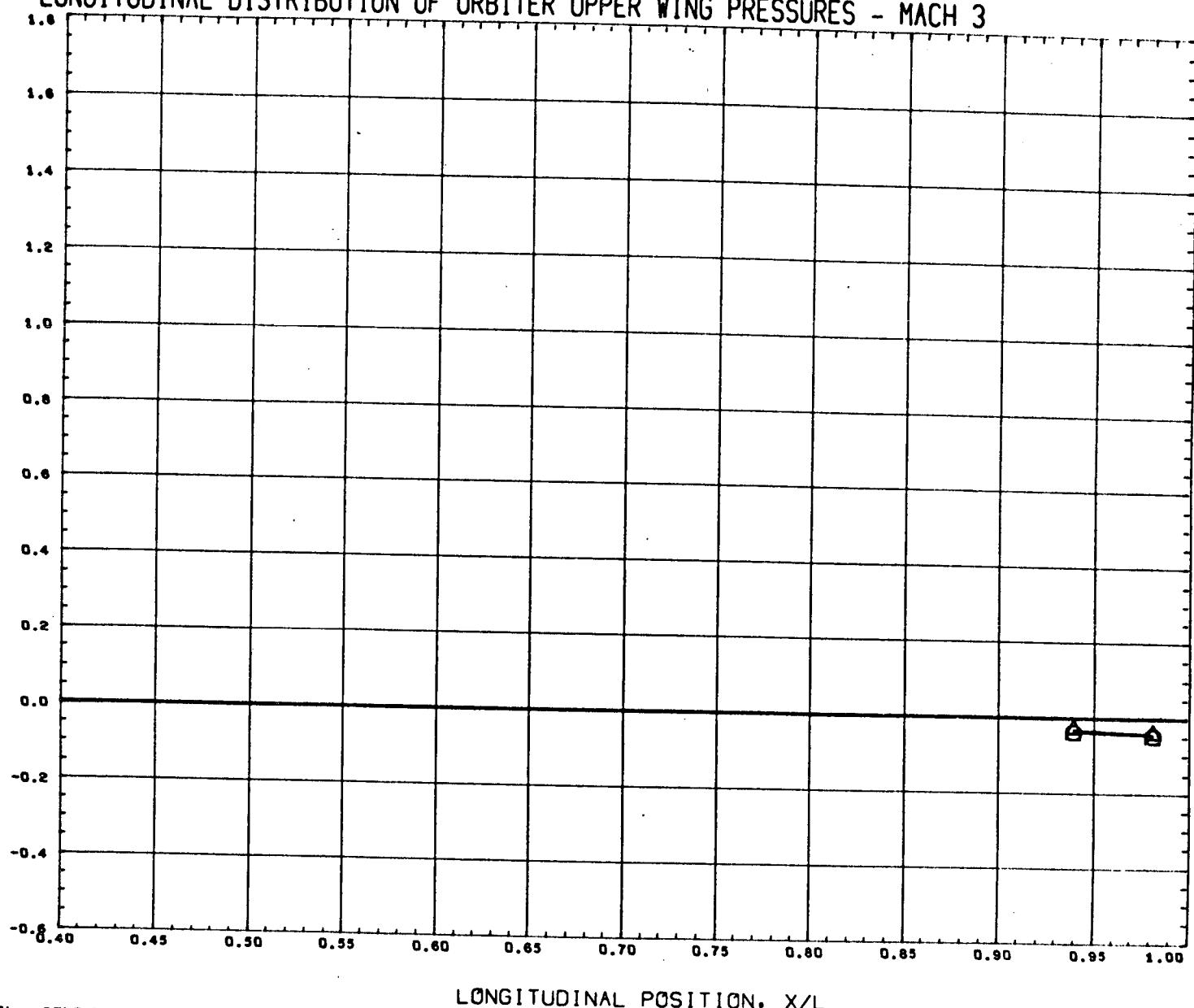
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8312•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
 O - 0.390 0.399 0.908
 D 0.476

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|---------|----------------|
| ALPHAB | = 4.945 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

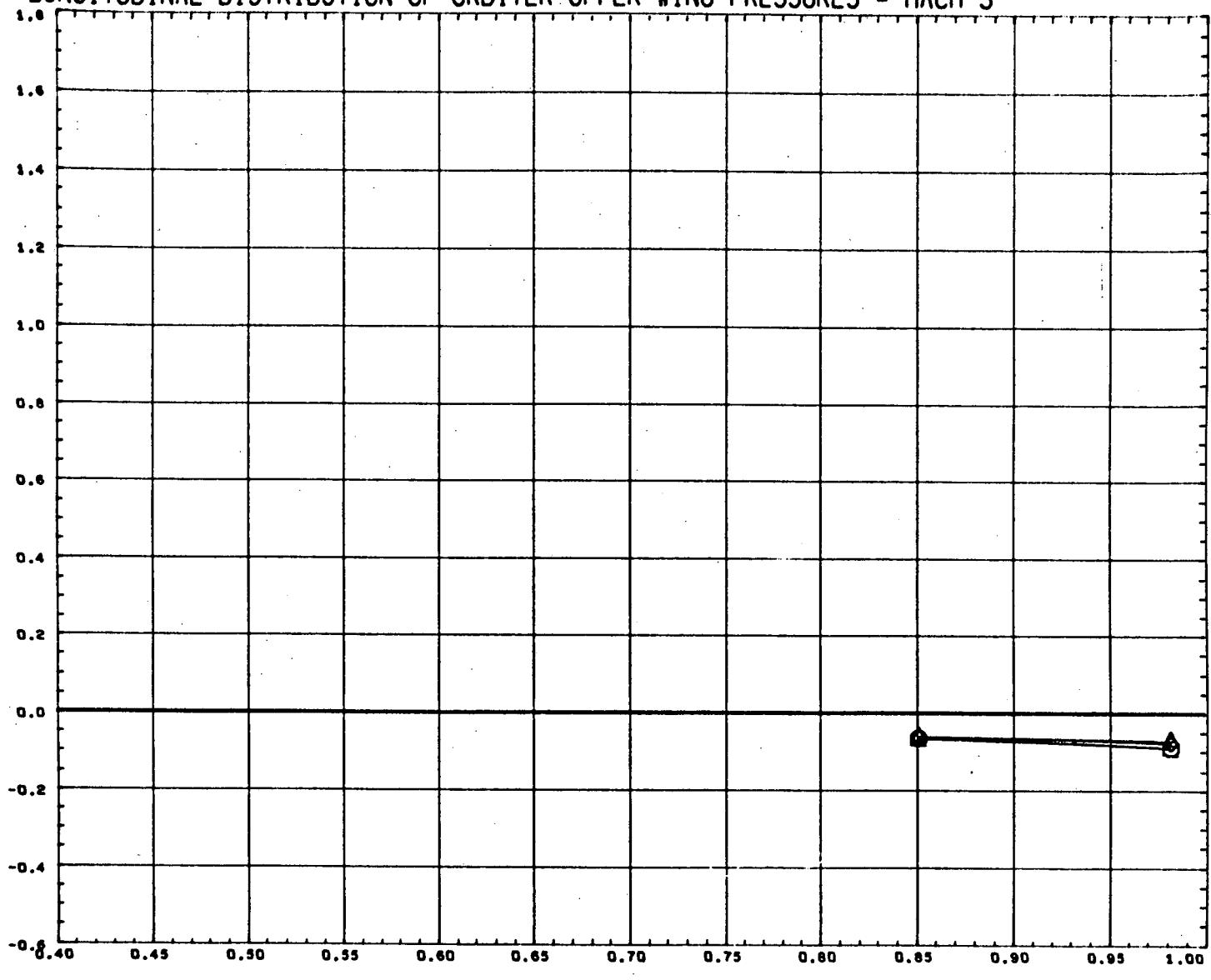
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8312•

PAGE 106

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| O | -0.143 | 0.289 | 0.120 |
| △ | 0.102 | | |
| ◊ | 0.228 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 0.008 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

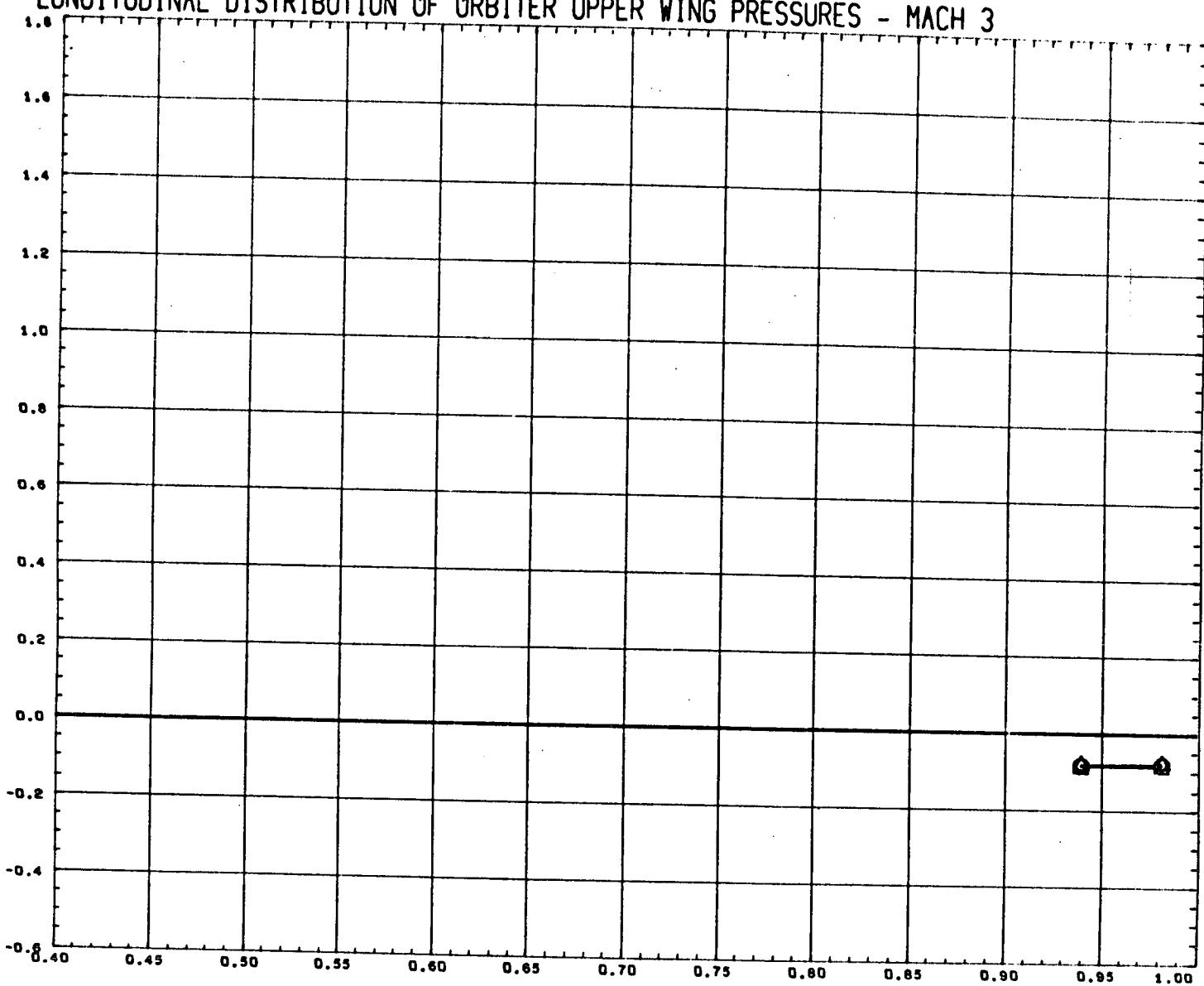
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8313•

PAGE 107

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 0.399 | 0.120 |
| △ | 0.102 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 0.008 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

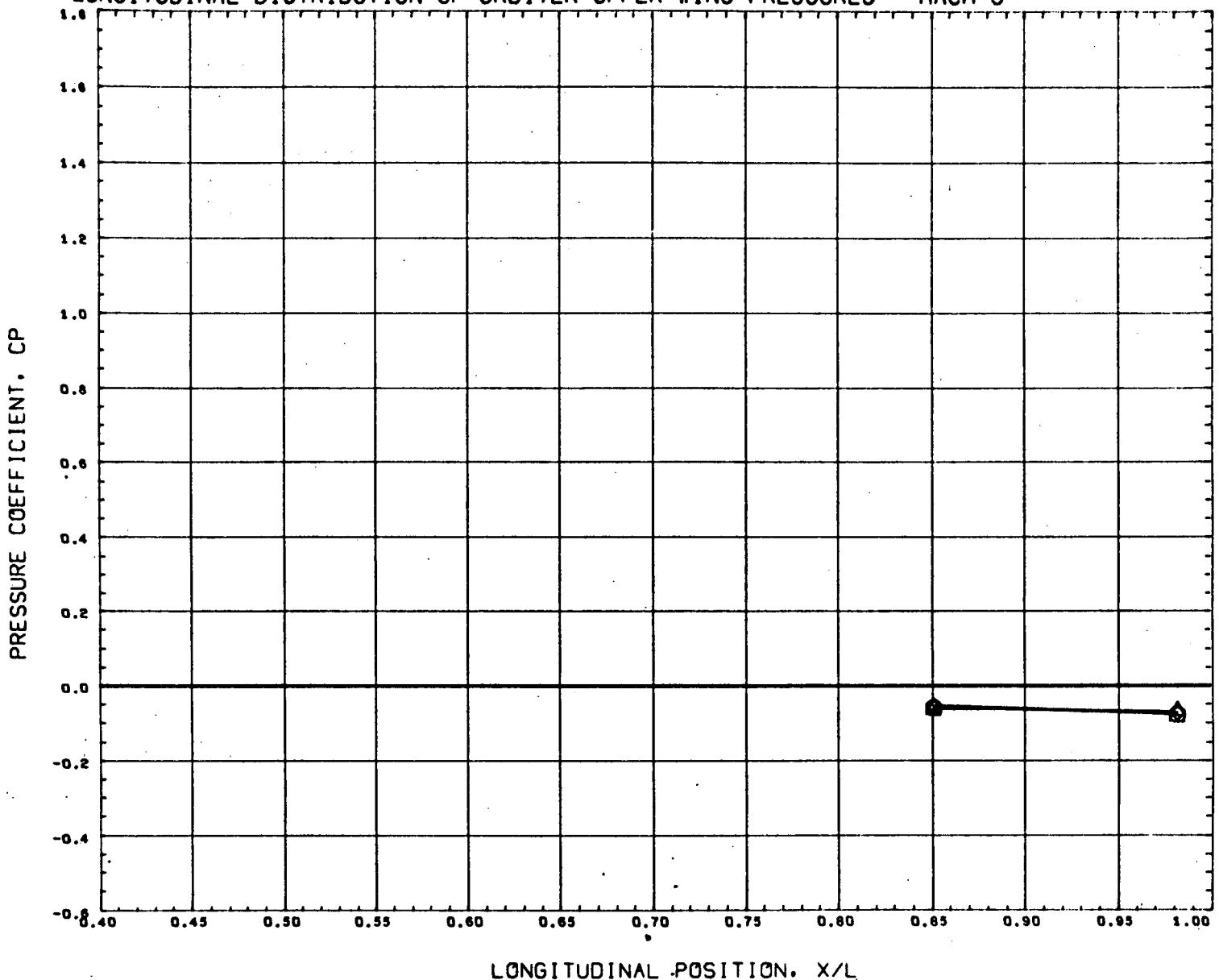
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AEDC VA1163 MOAC ORBITER (UPPER WING)

•GT8313•

PAGE 108

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



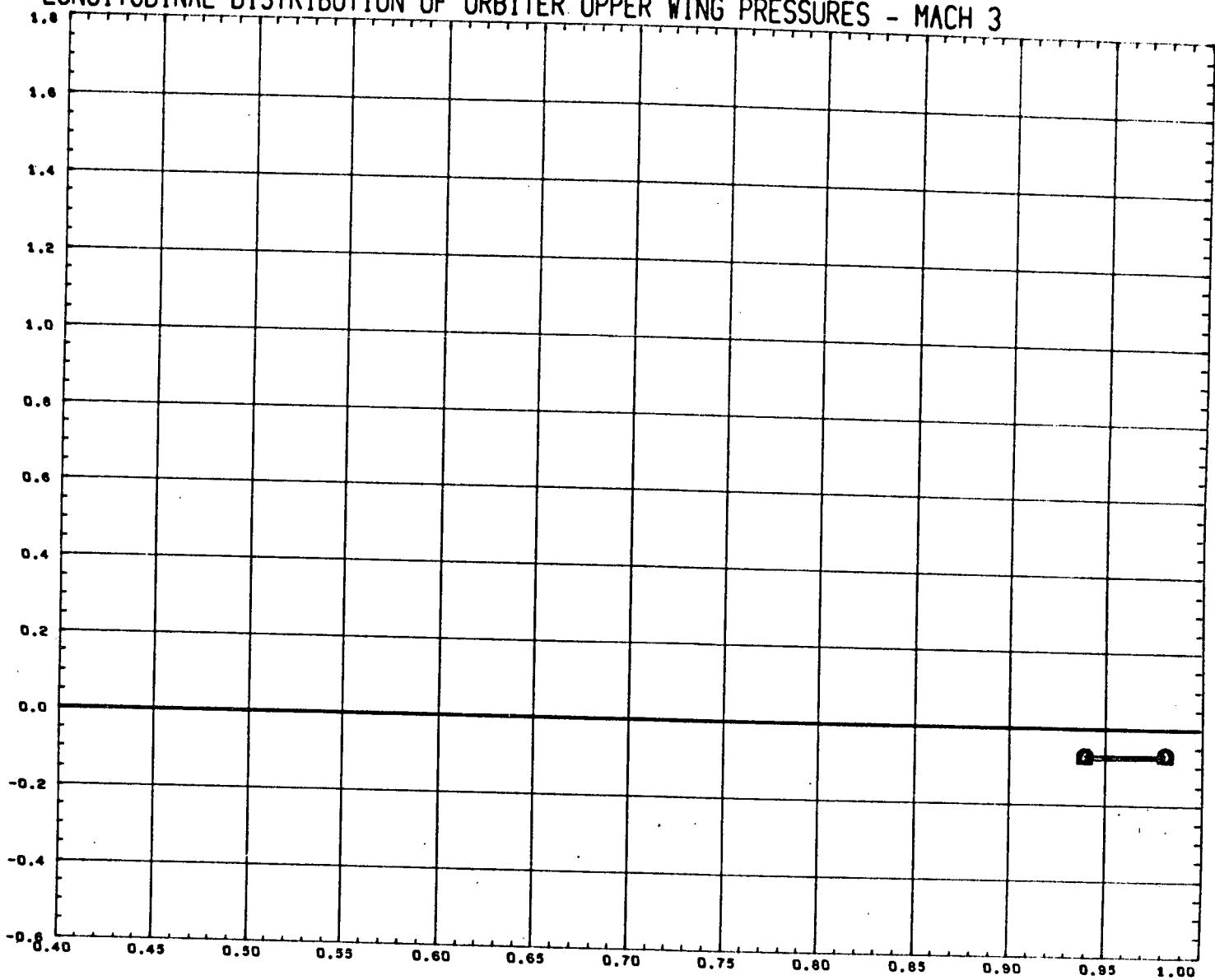
REFERENCE FILE
 AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8313•

PAGE 109

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|------------|--------|-------|--------|
| Δ | -0.144 | 0.399 | 0.151 |
| \diamond | 0.103 | | |
| \diamond | 0.225 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 0.008 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

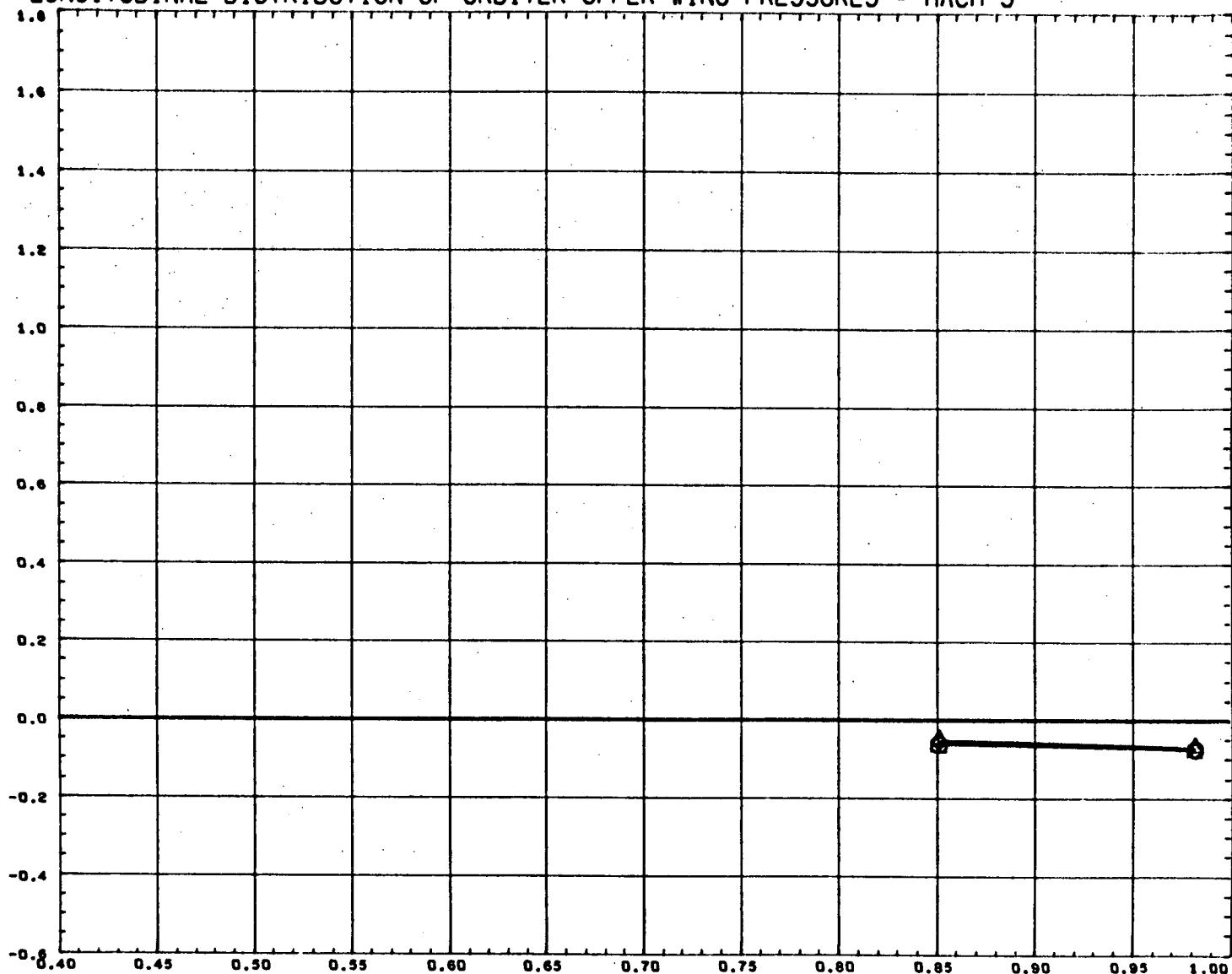
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8313•

PAGE 110

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|------------|---------|-------|---------|
| Δ | - 0.144 | 0.289 | 0.228 |
| \diamond | 0.103 | | |
| \diamond | 0.227 | | |

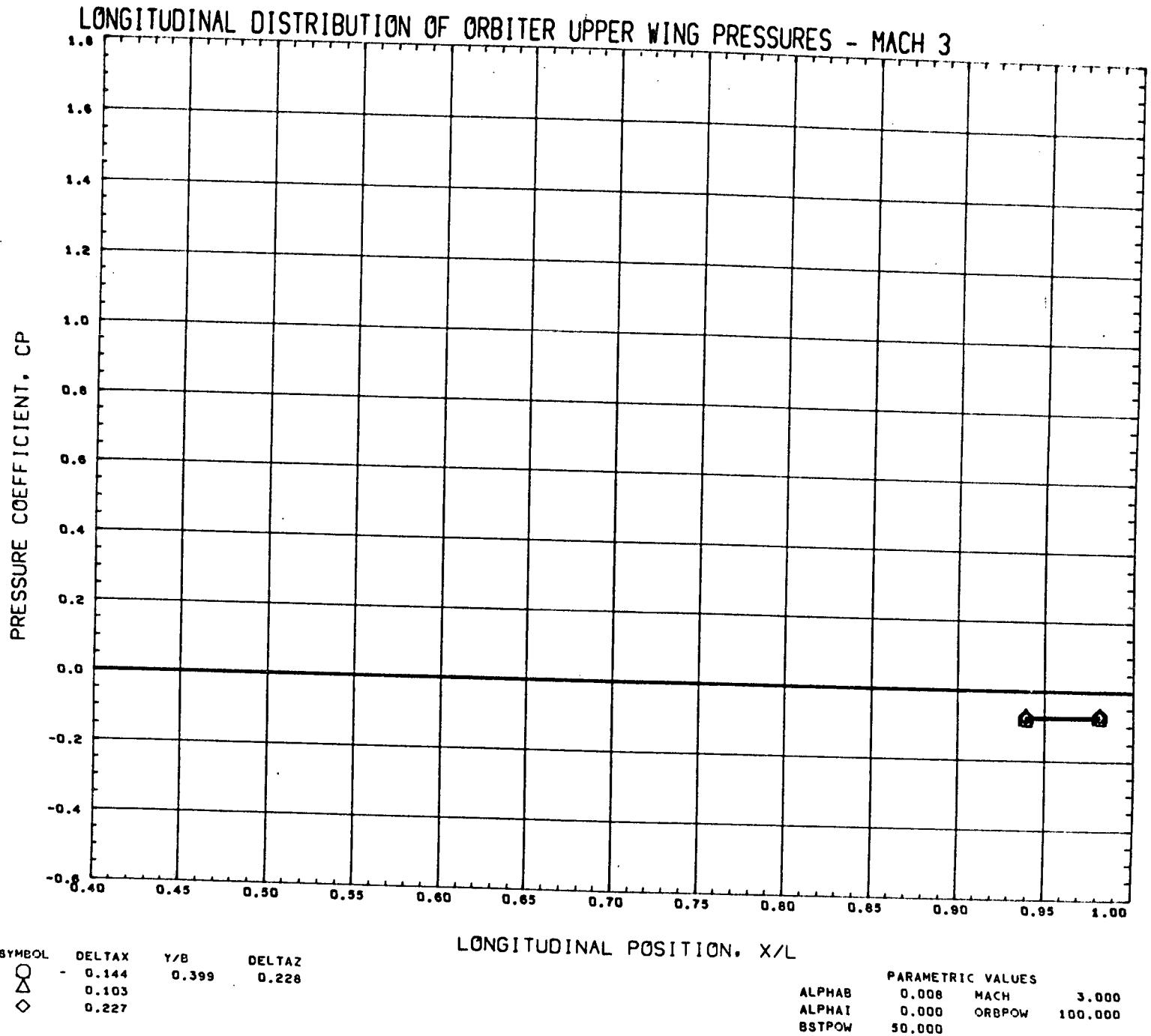
| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|---------|
| ALPHAB | 0.008 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8313•

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REFERENCE FILE

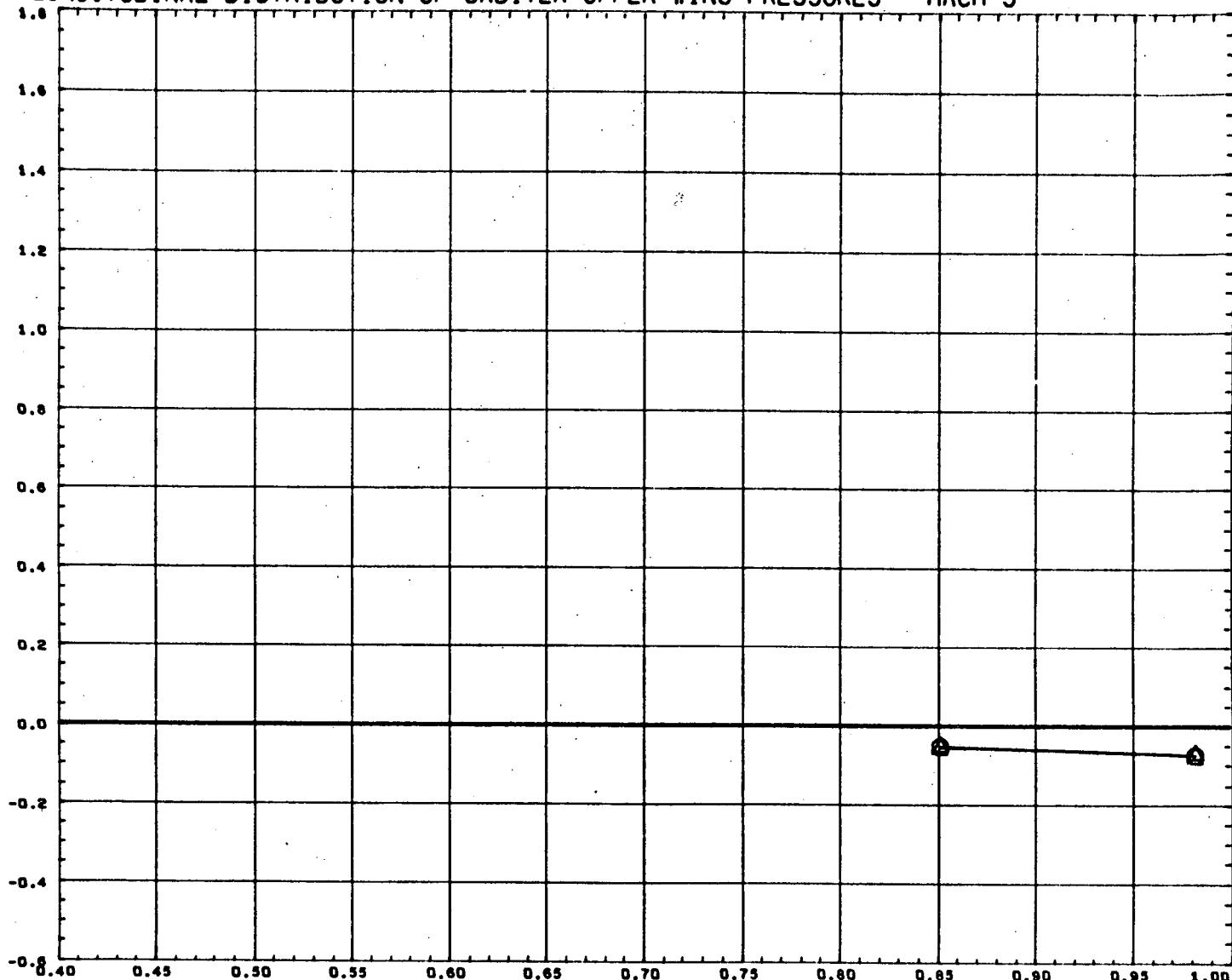
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8313•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| O | -0.390 | 0.289 | 0.908 |
| ▲ | 0.479 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 0.008 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

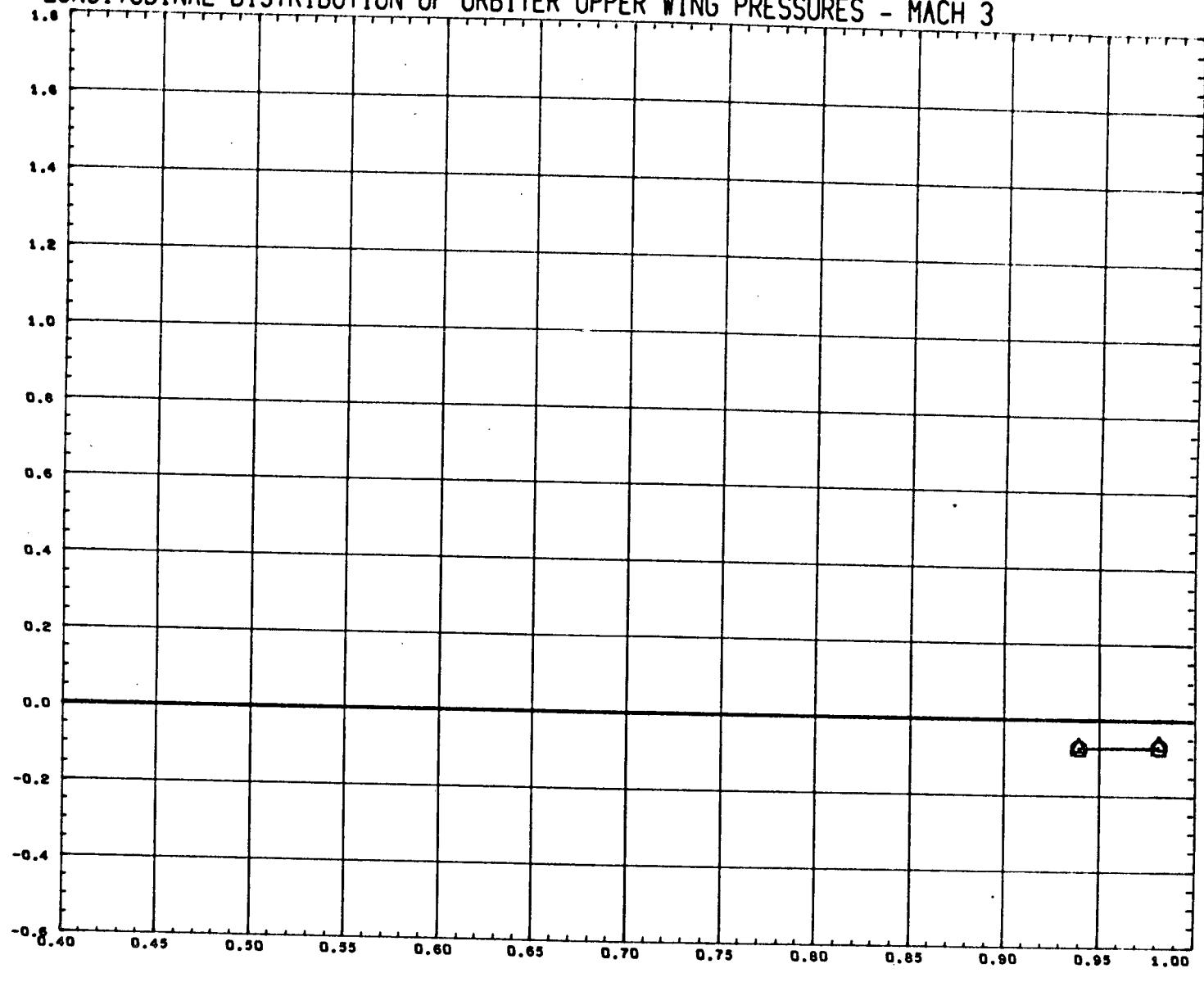
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8313•

PAGE 113

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/Z DELTAZ

\odot - 0.390 0.399 0.908

Δ 0.479

LONGITUDINAL POSITION, X/L

PARAMETRIC VALUES

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|---------|
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

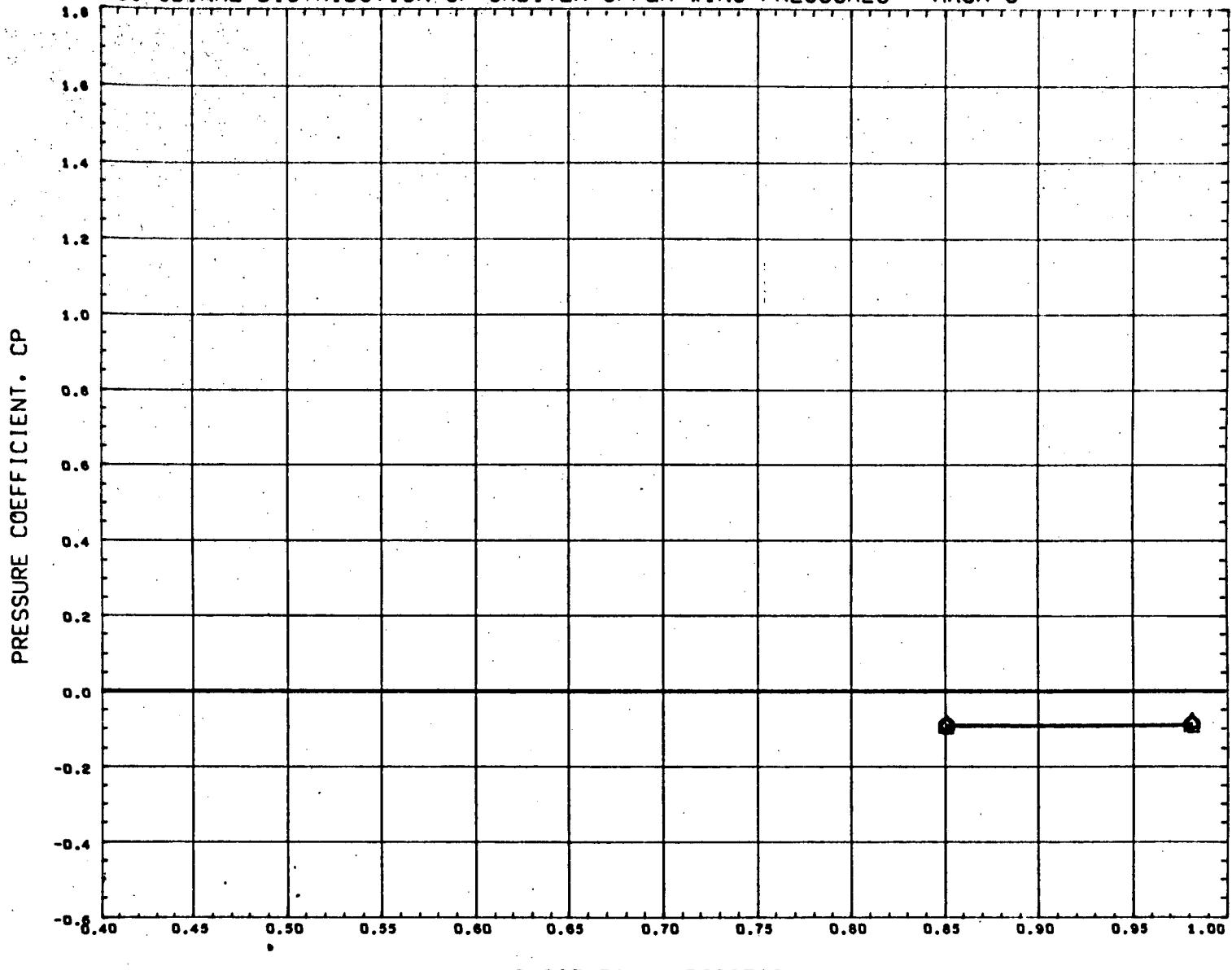
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AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8313•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



REFERENCE FILE

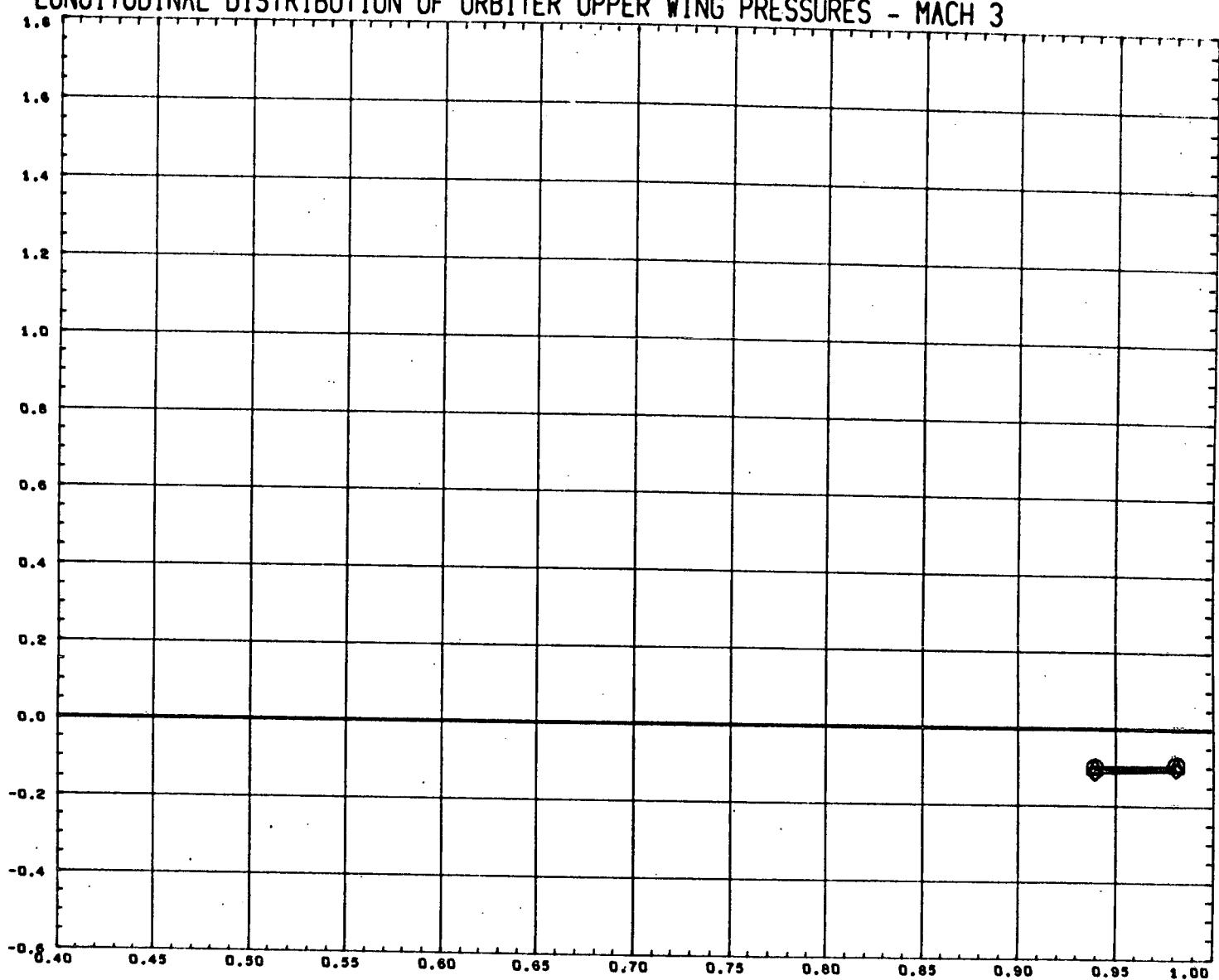
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8314•

PAGE 115

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| - | 0.143 | 0.399 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 5.017 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

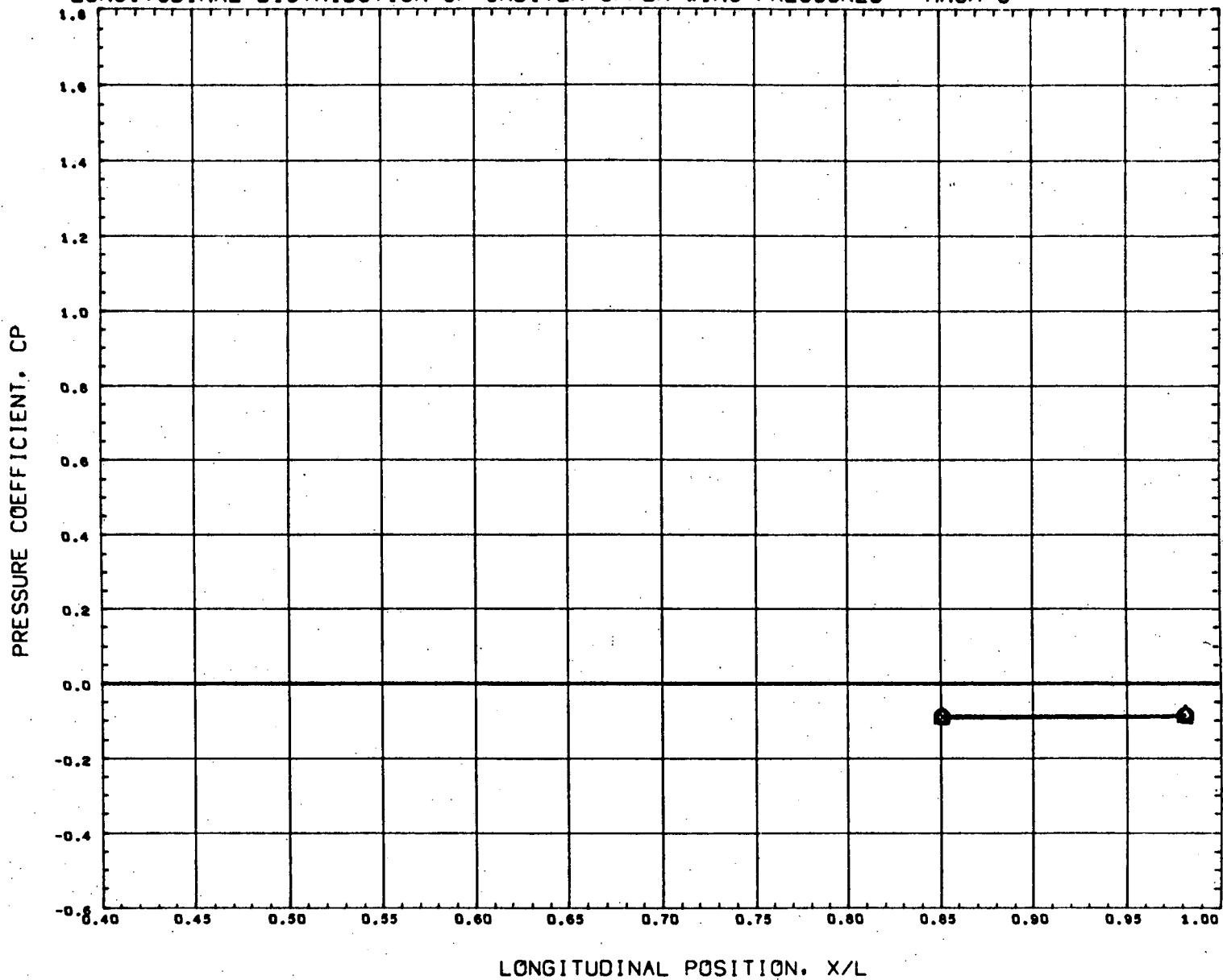
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8314•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.144 | 0.289 | 0.191 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 5.017 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

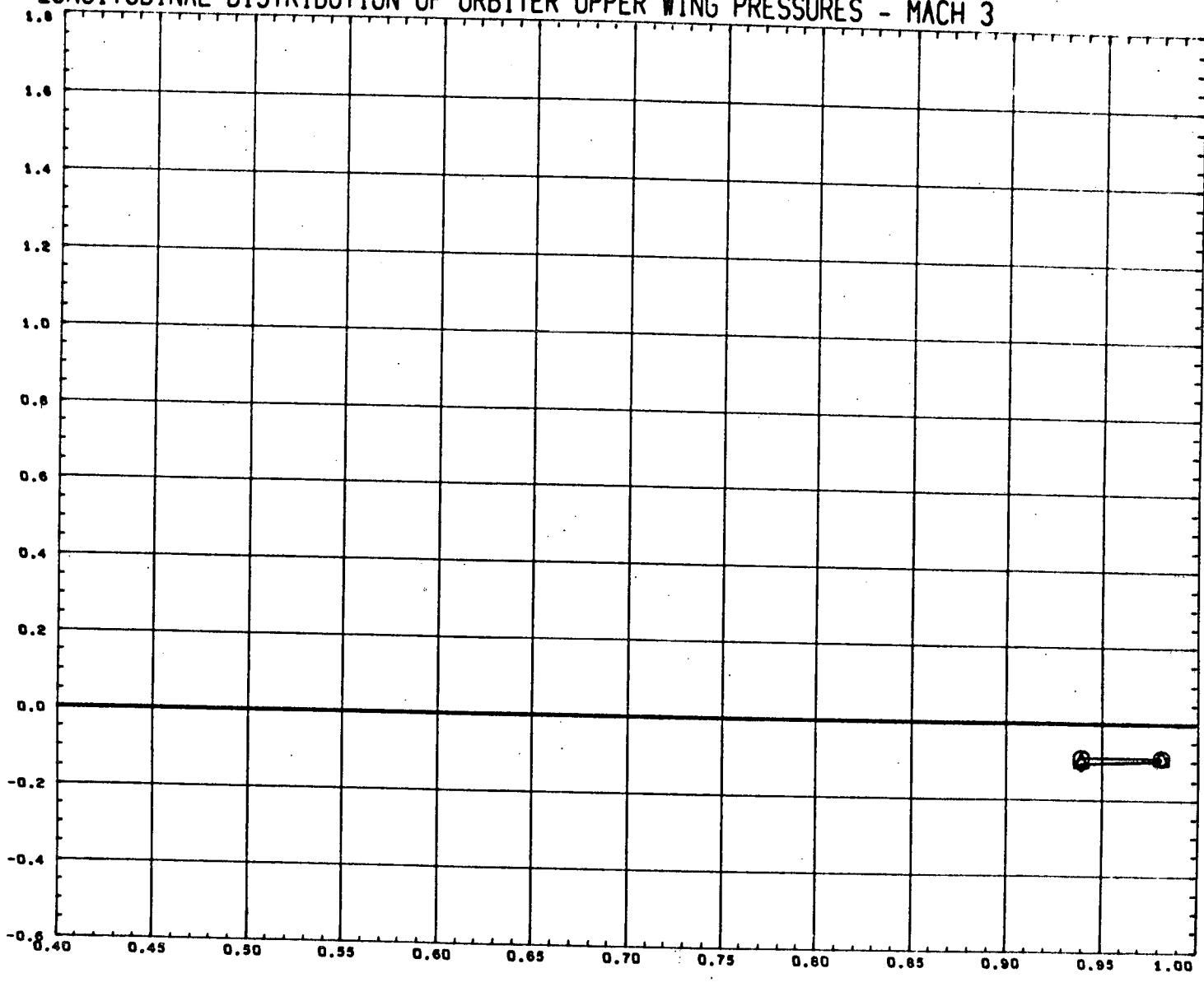
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8314•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.144 | 0.399 | 0.151 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|---------|
| ALPHAB | 5.017 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

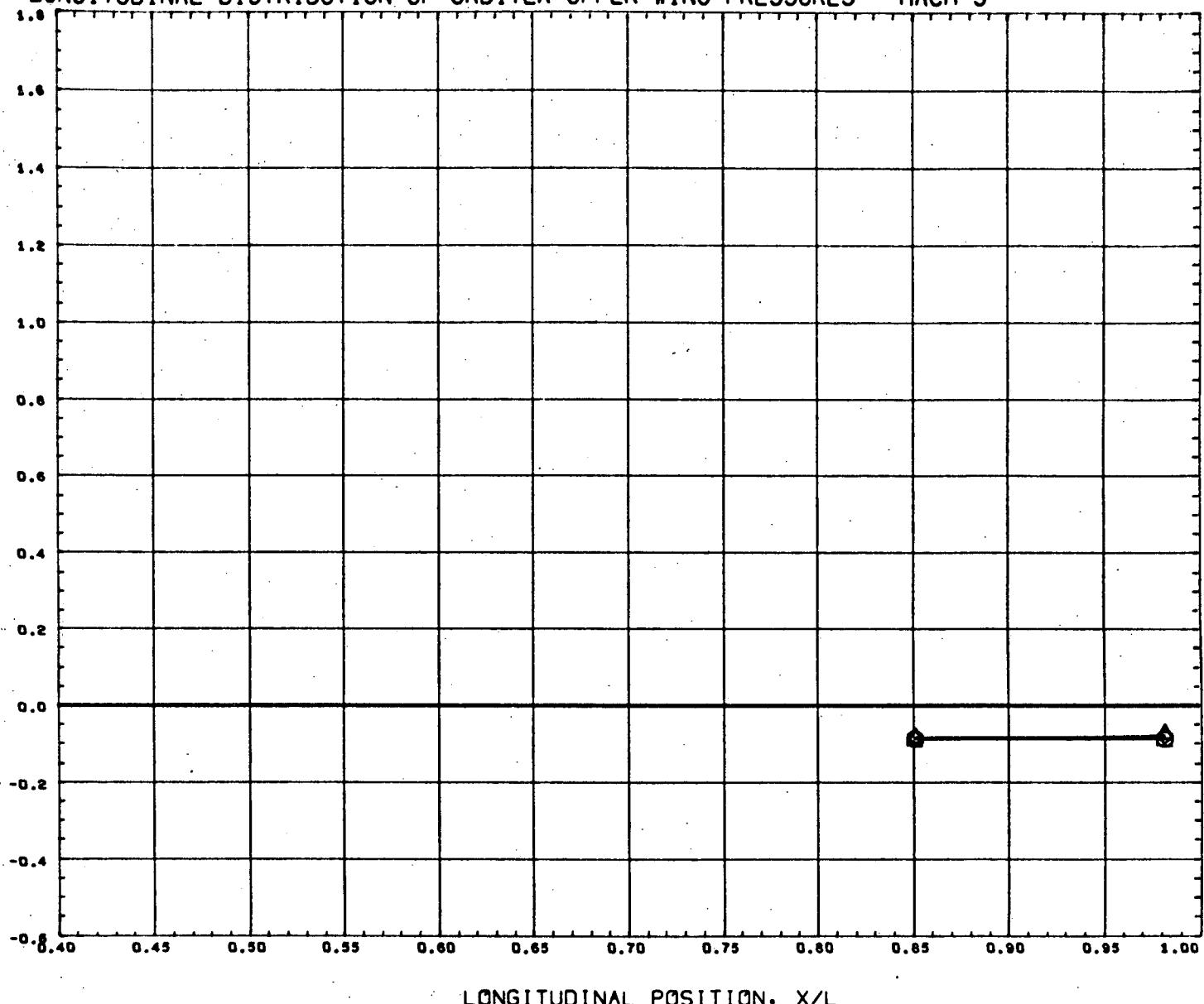
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8314•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| O | -0.144 | 0.269 | 0.226 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 5.017 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

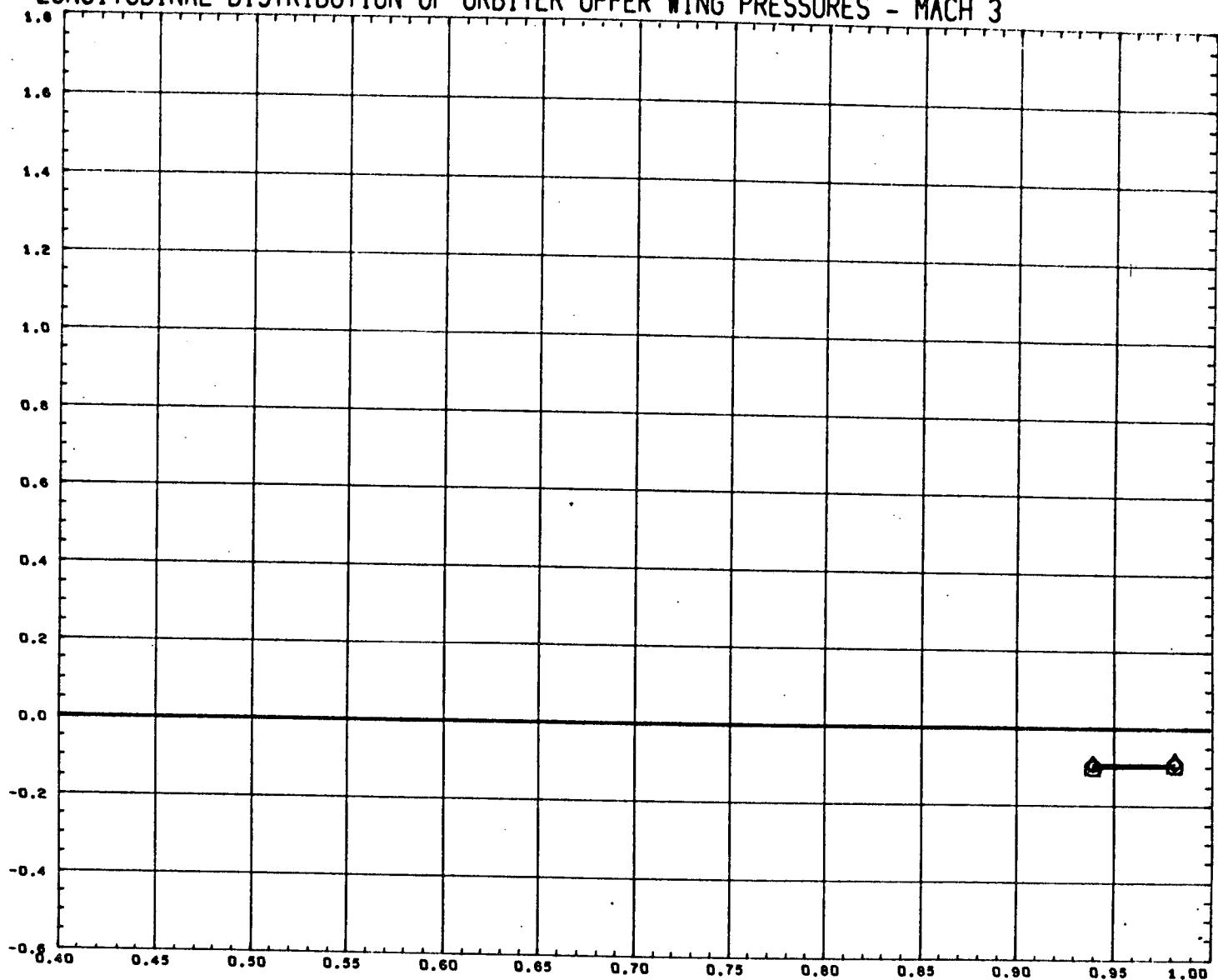
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8314•

PAGE 119

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| △ | - 0.144 | 0.399 | 0.228 |
| ○ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 5.017 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

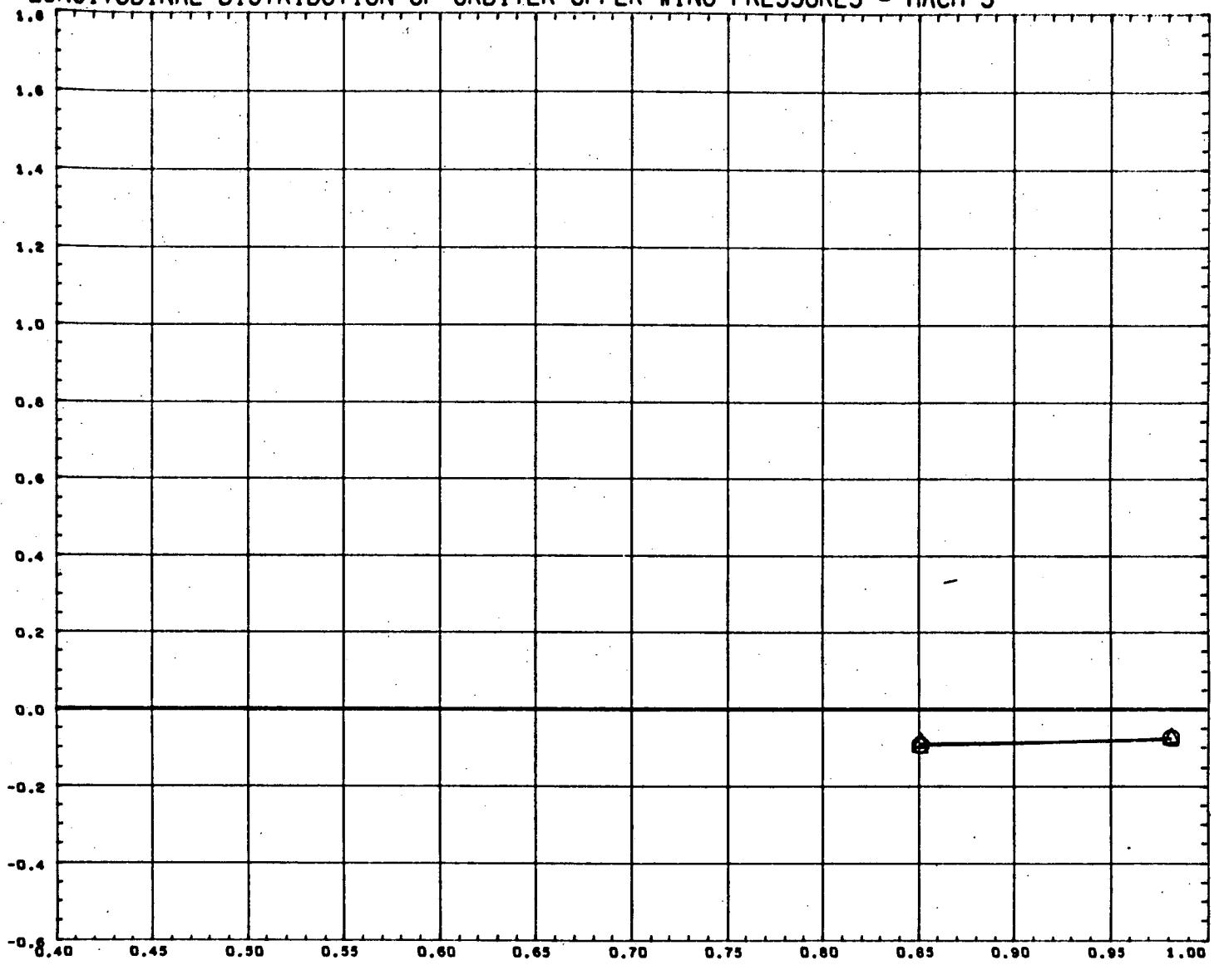
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8314•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| O | 0.390 | 0.269 | 0.908 |
| △ | 0.521 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 5.017 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

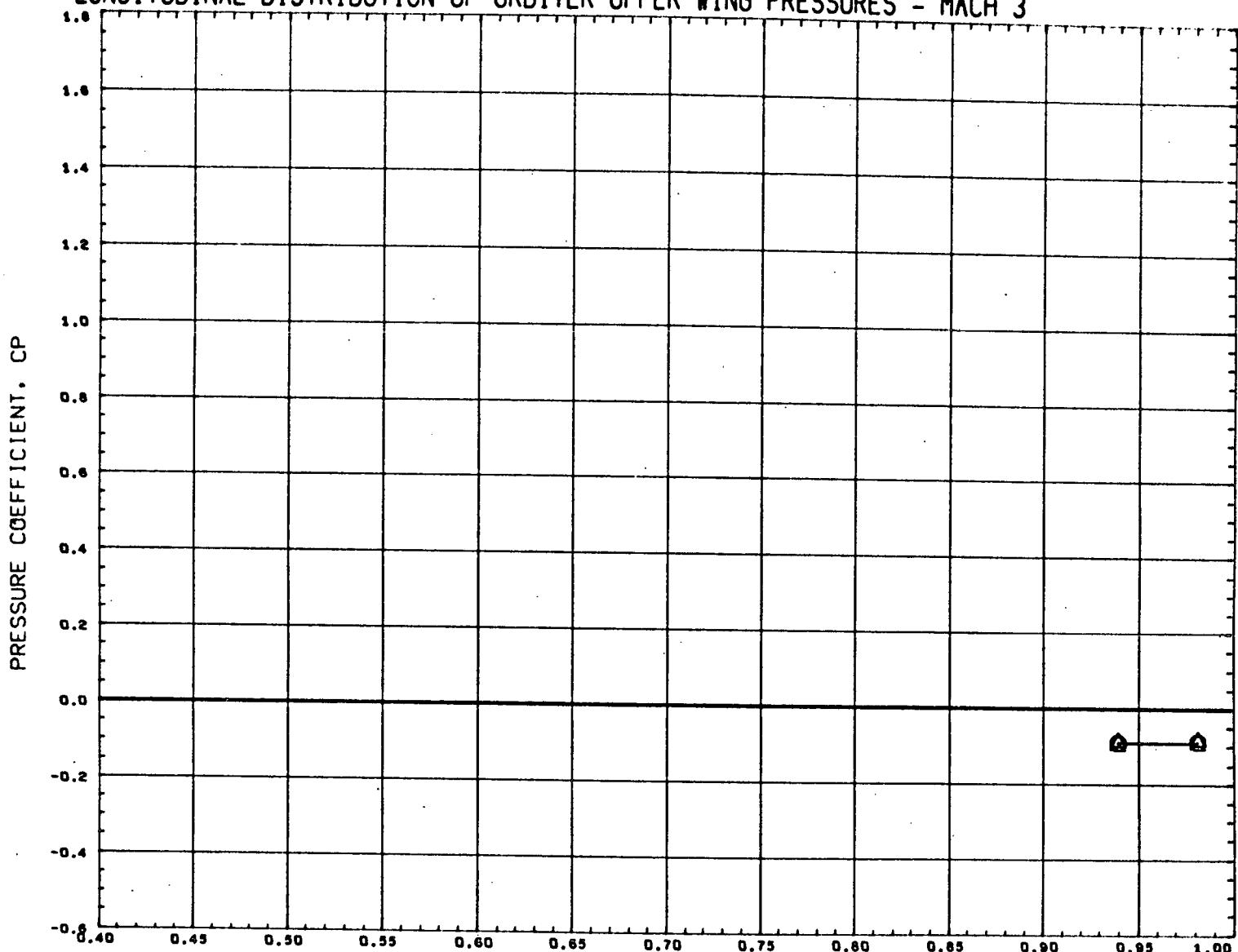
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8314•

PAGE 121

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

○ - 0.390 0.399 0.908

△ 0.521

PARAMETRIC VALUES

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|---------|
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

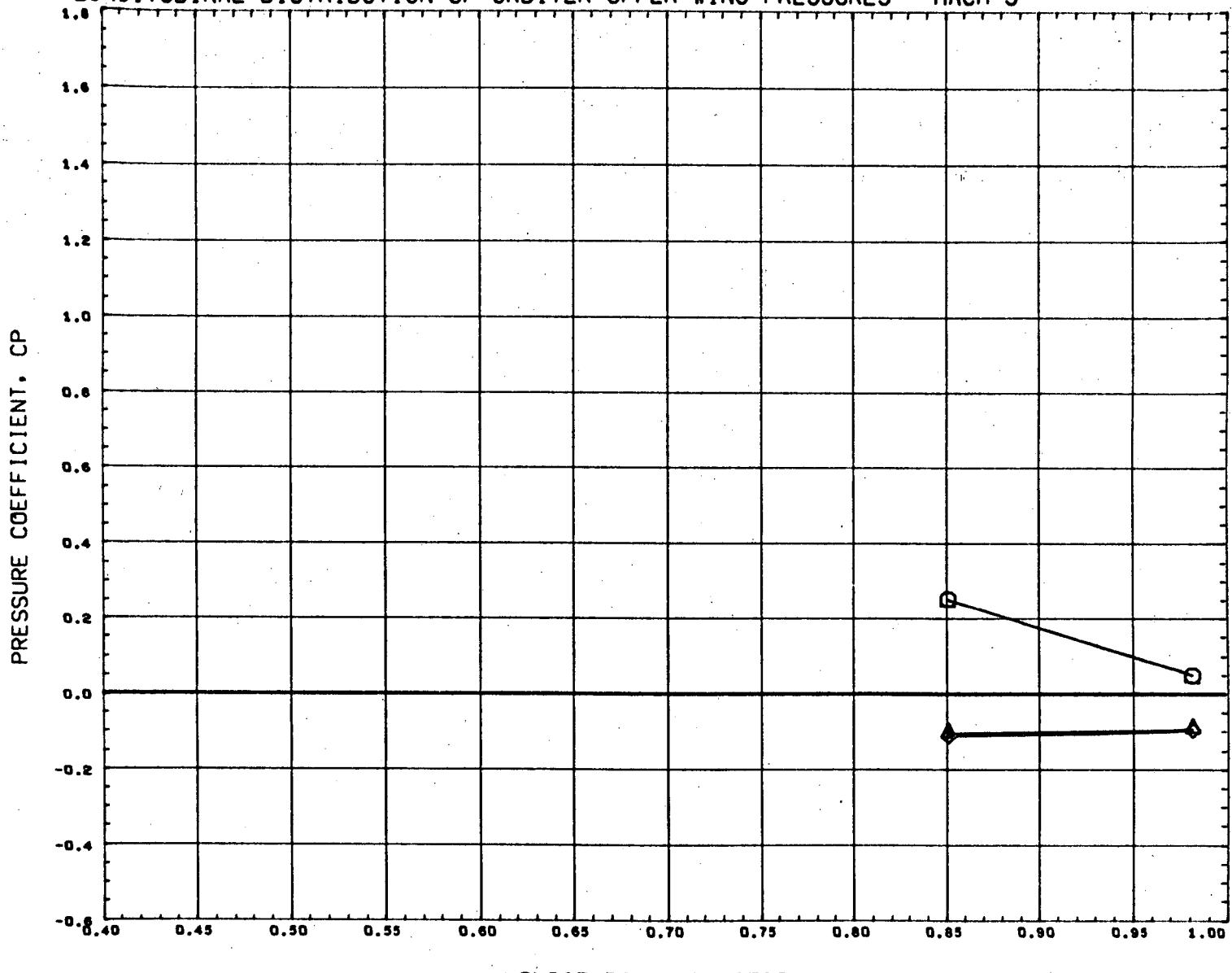
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8314•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 0.289 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 10.003 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

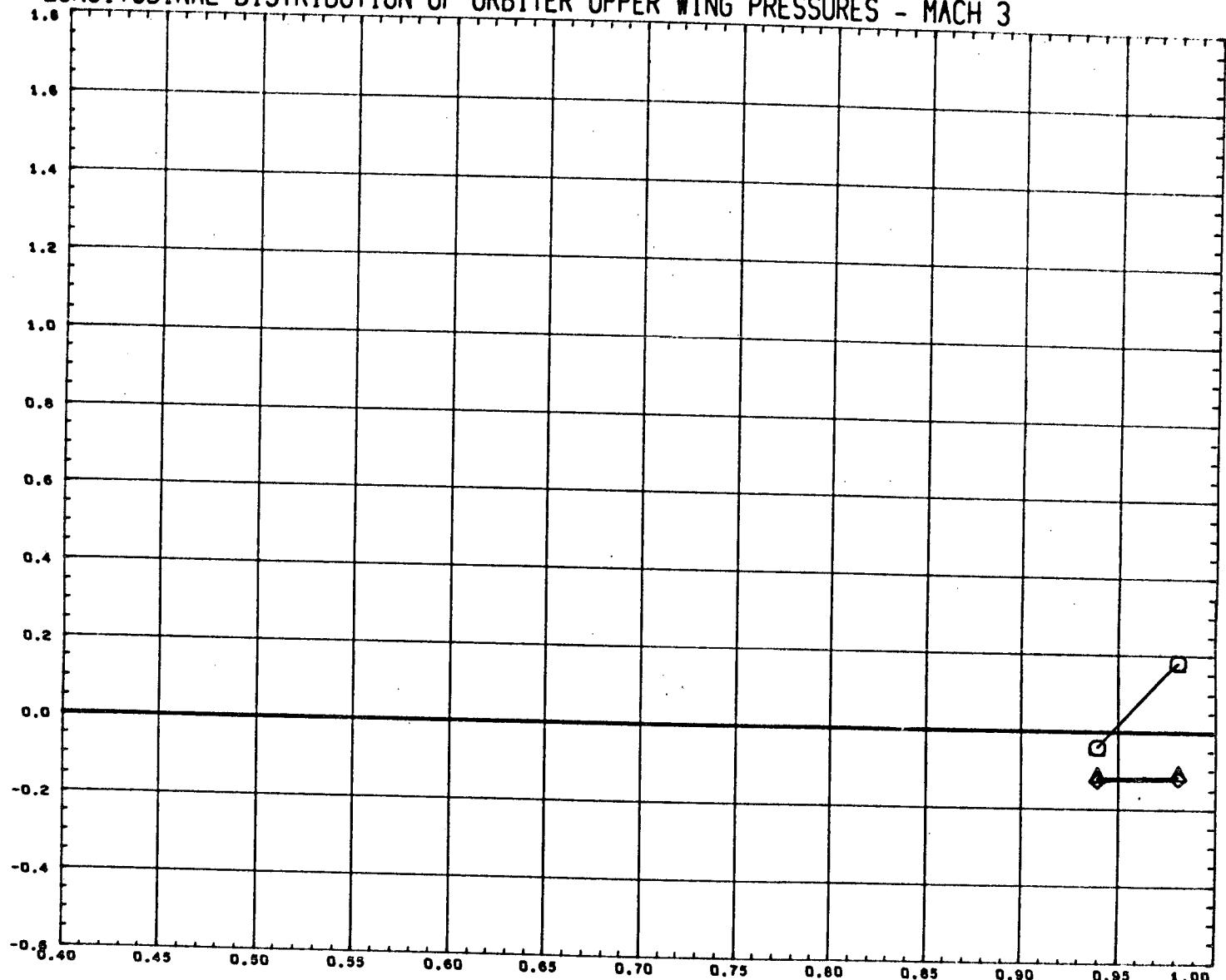
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8315•

PAGE 123

PRESSURE COEFFICIENT. CP

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| △ | - 0.143 | 0.399 | 0.120 |
| ○ | 0.103 | | |
| ◊ | 0.227 | | |

LONGITUDINAL POSITION. X/L

| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|---------|
| ALPHAB | 10.003 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

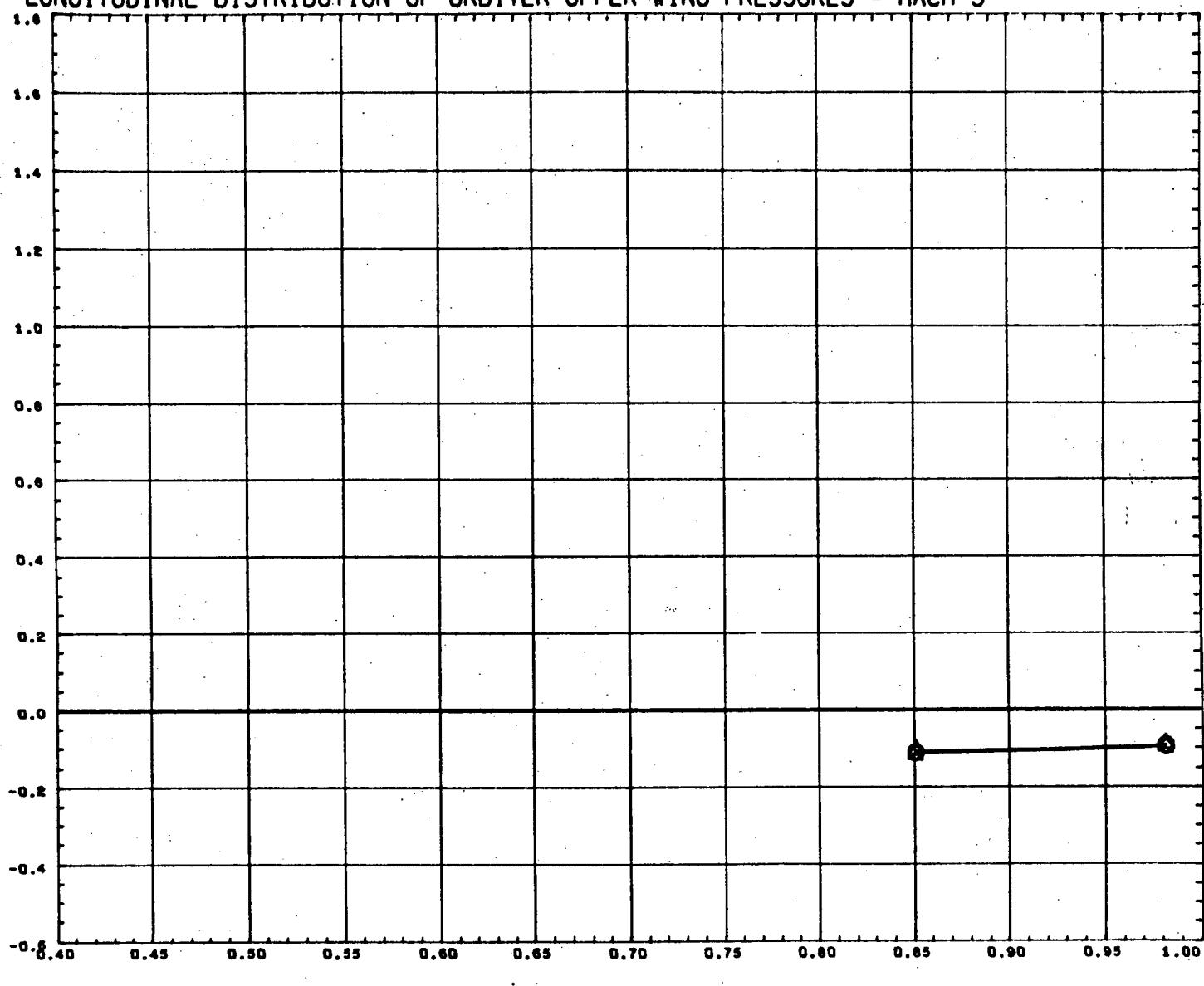
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8315•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| - | 0.143 | 0.289 | 0.151 |
| ◊ | 0.104 | | |
| ◇ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|---------------|
| ALPHAB | 10.003 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

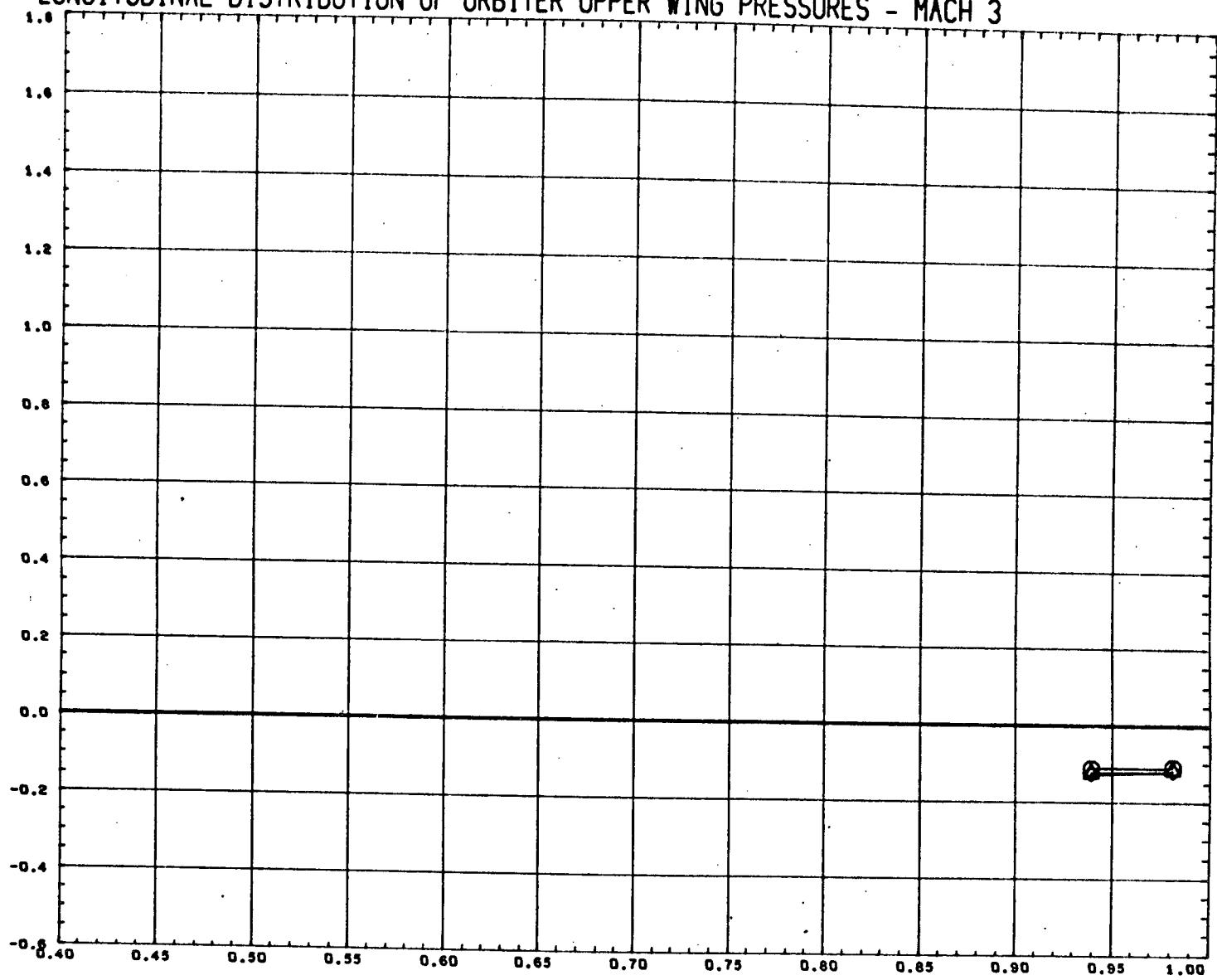
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8315•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| △ | - 0.143 | 0.399 | 0.151 |
| | 0.104 | | |
| ◊ | 0.226 | | |

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 10.003 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

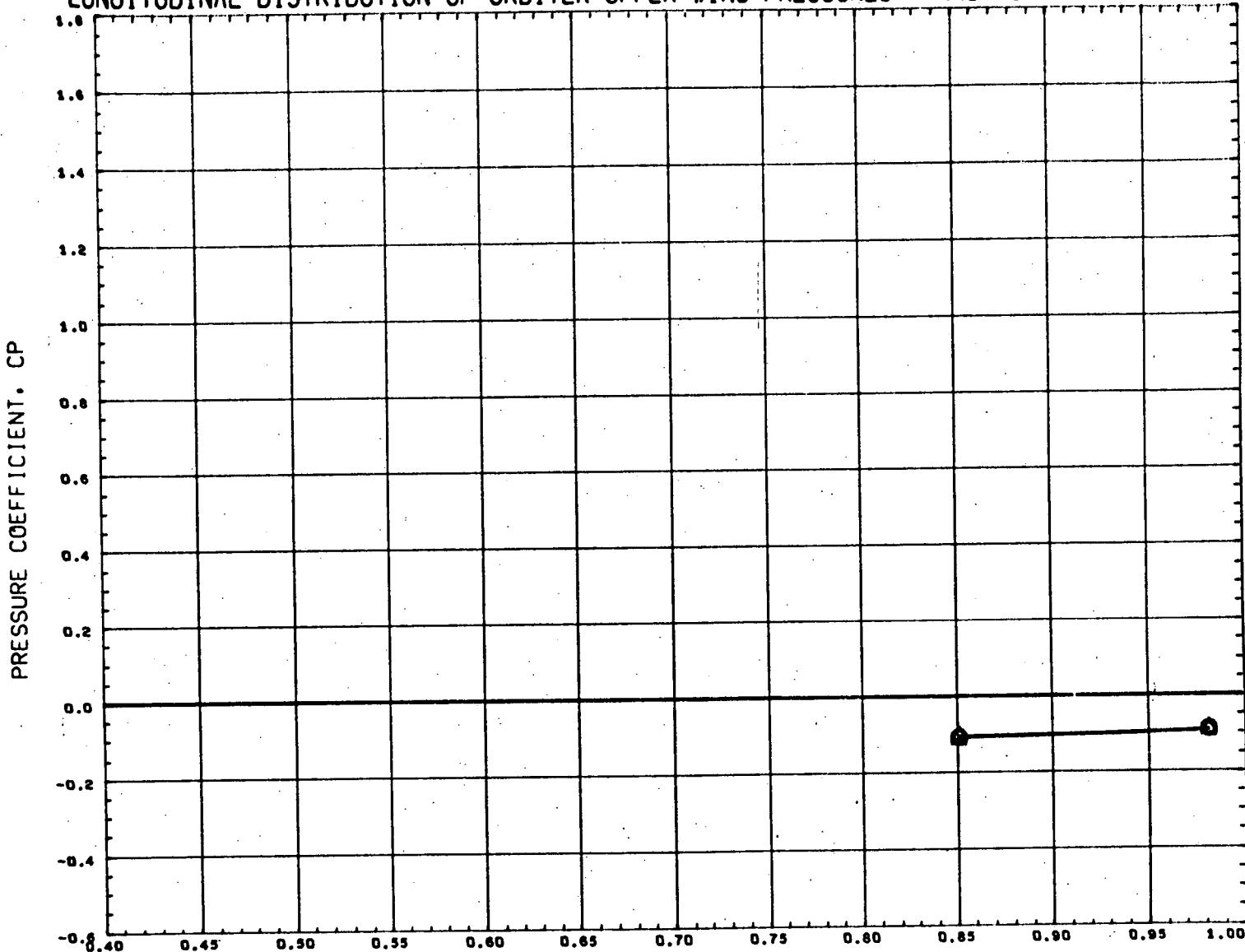
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8315•

PAGE 126

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| - | 0.143 | 0.269 | 0.228 |
| 0.103 | | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|---------|
| ALPHAB | 10.003 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

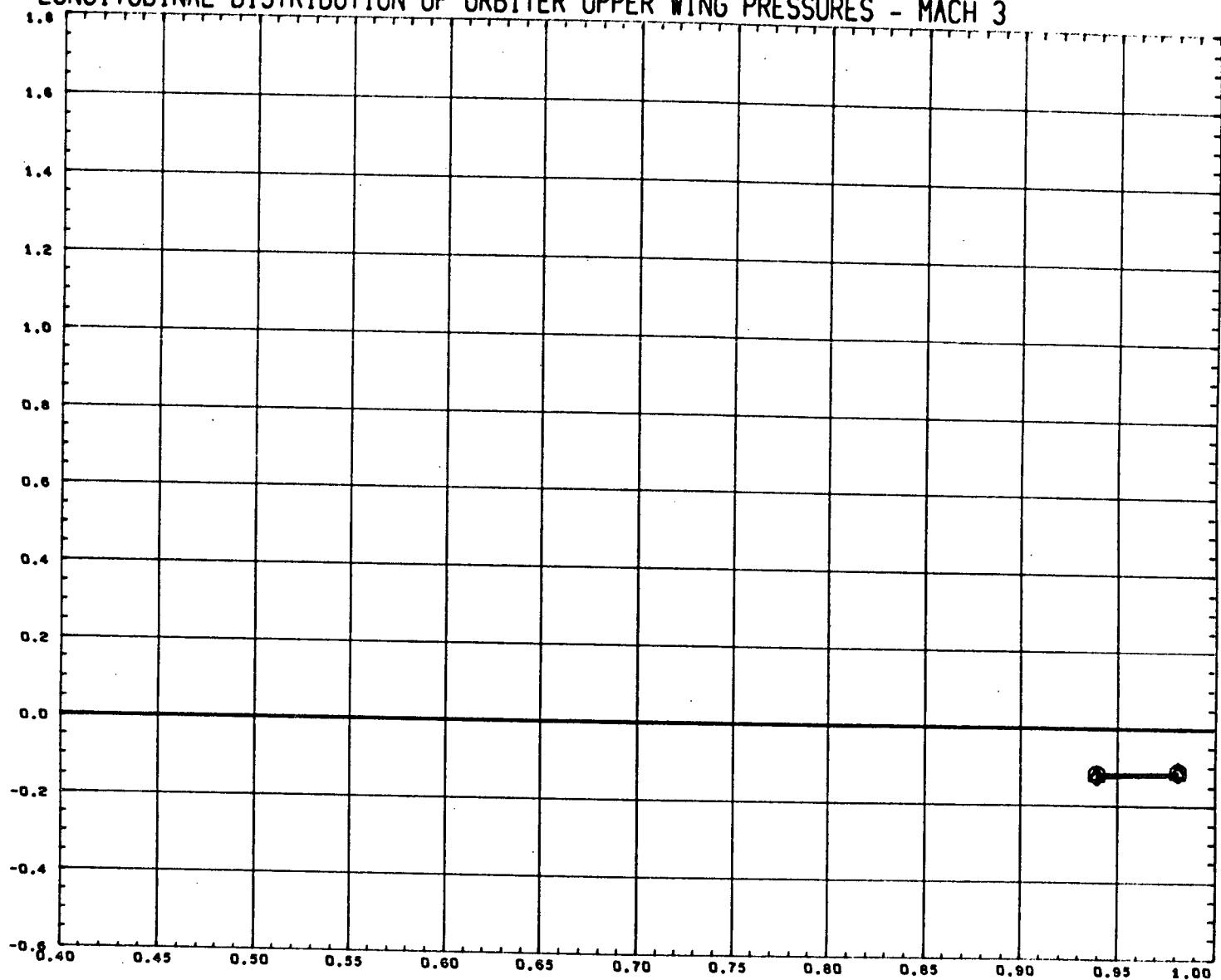
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8315•

PAGE 127

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| O | -0.143 | 0.399 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|---------|
| ALPHAB | 10.003 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

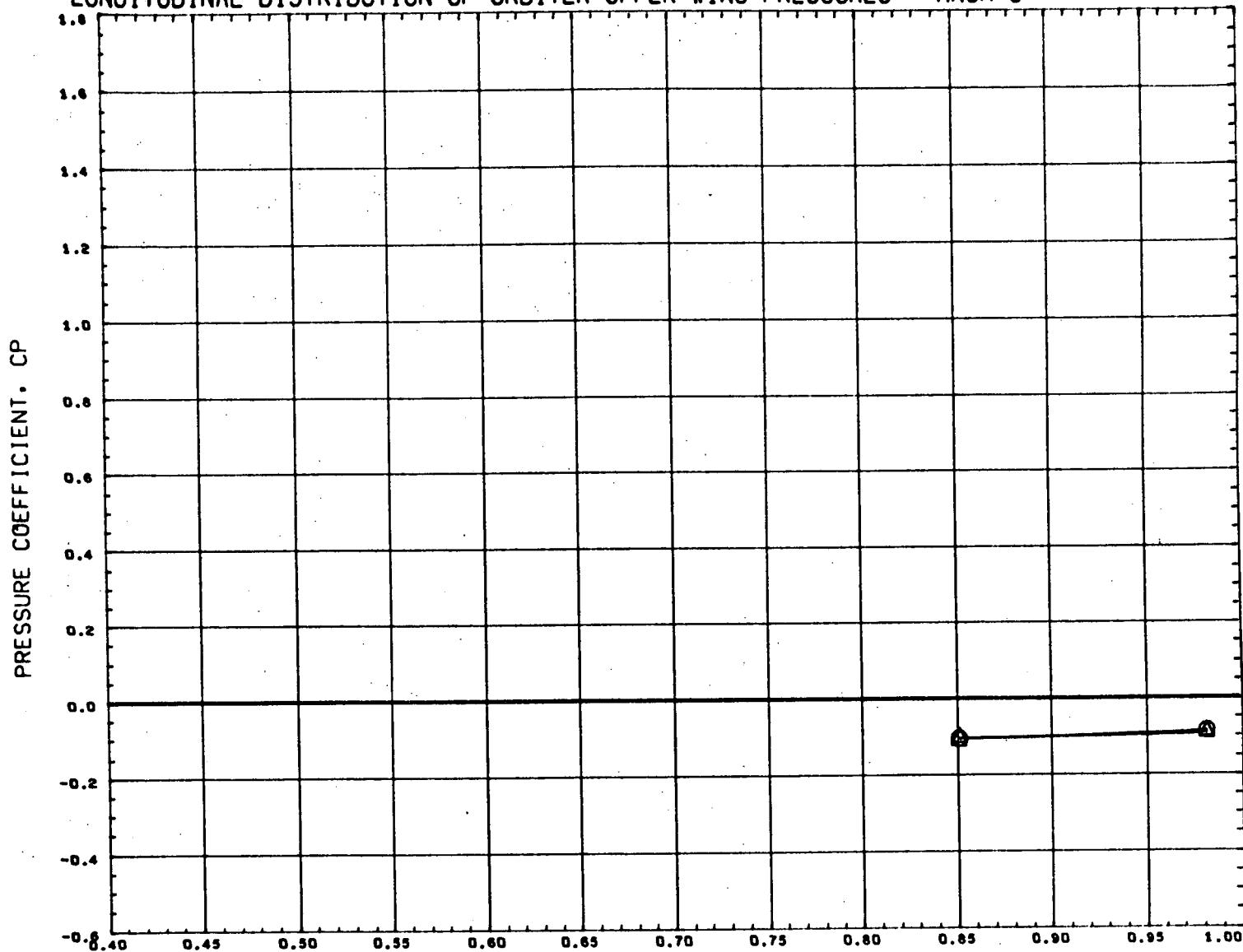
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8315•

PAGE 128

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|-----------|---------|-------|--------|
| \square | - 0.391 | 0.269 | 0.908 |
| Δ | | 0.518 | |

| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|---------|
| ALPHAB | 10.003 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

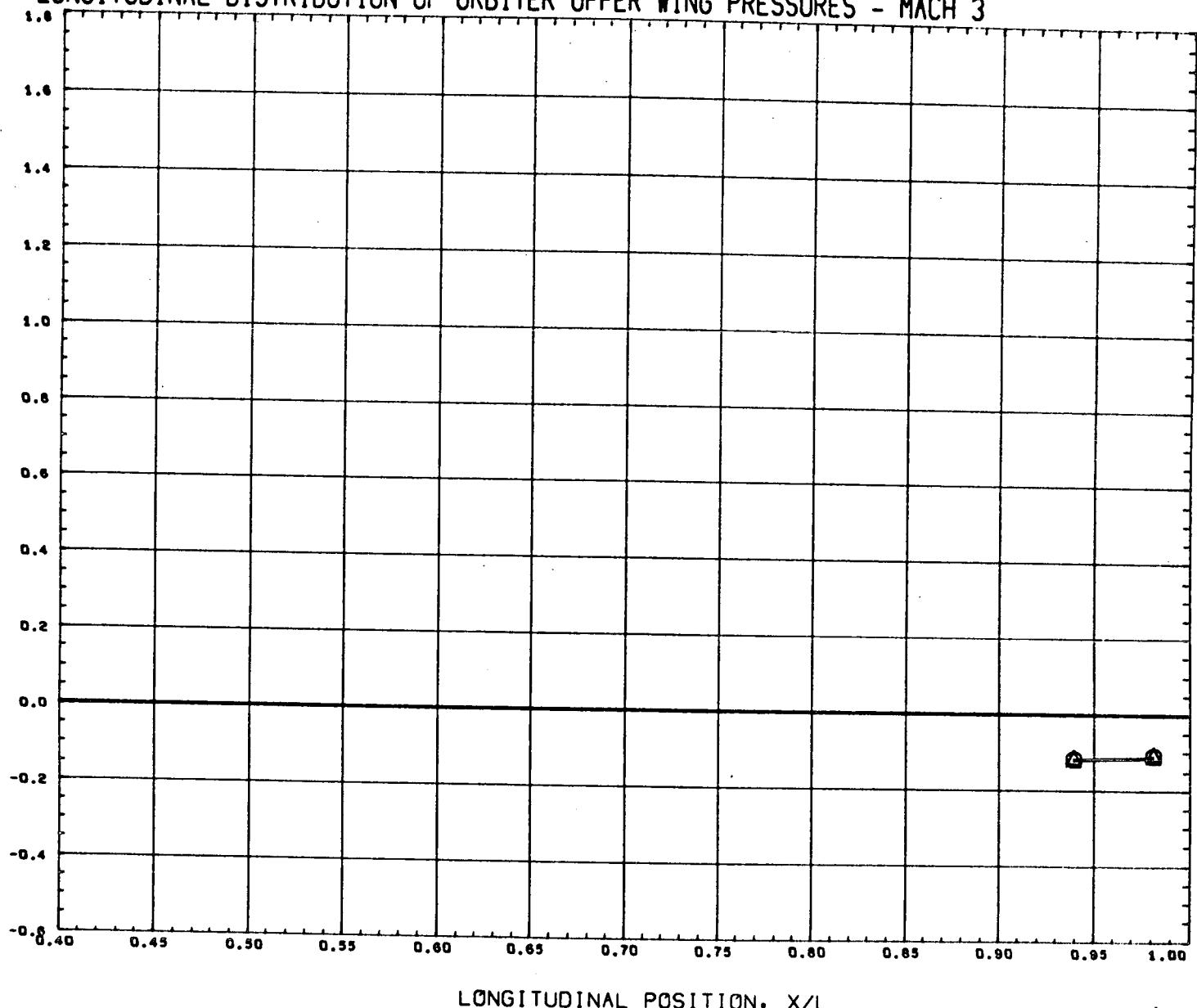
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8315•

PAGE 129

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
 O - 0.391 0.399 0.908
 △ 0.518

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|---------|
| ALPHAB | 10.003 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

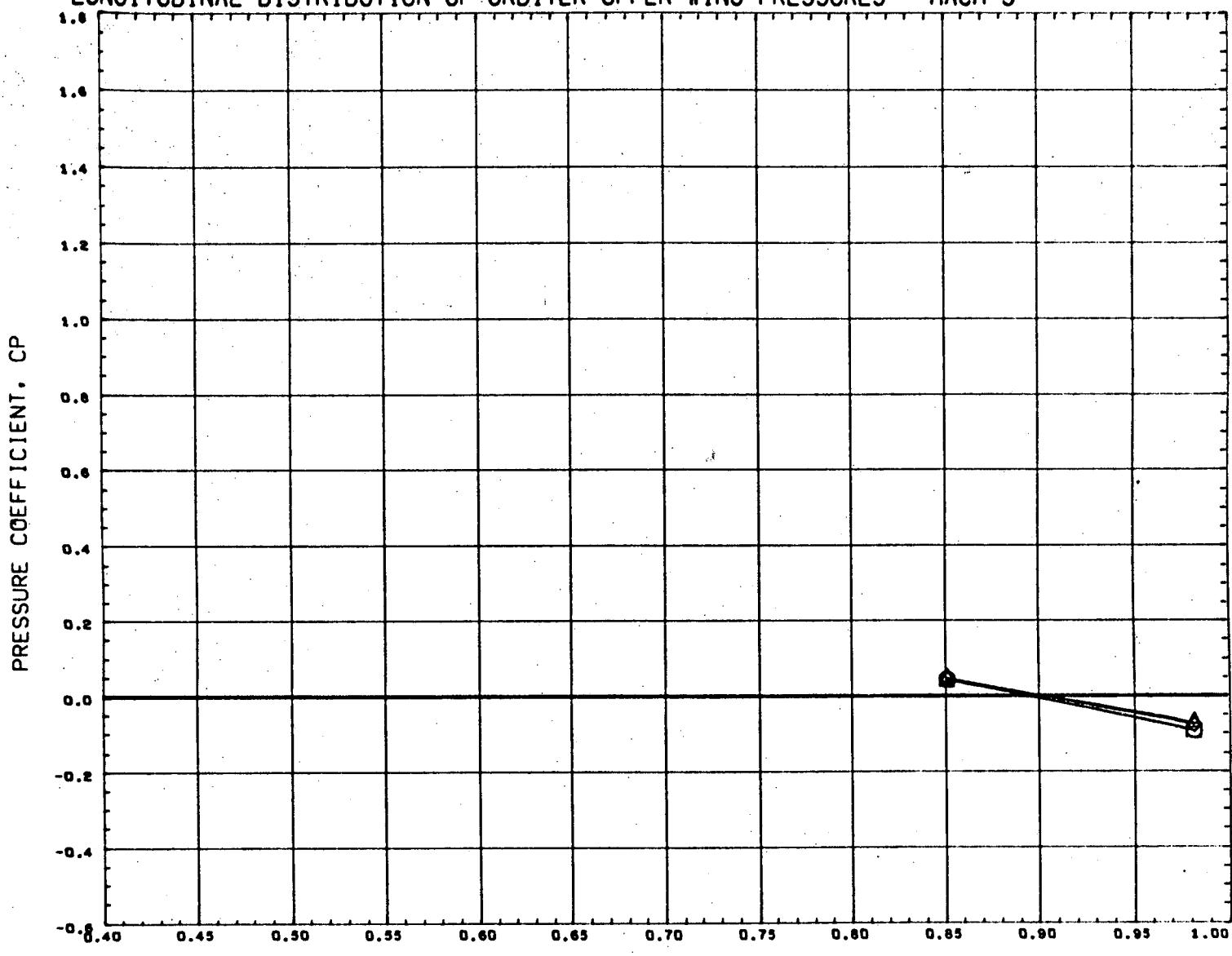
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8315•

PAGE 130

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|-------------|---------|-------|-------|
| \square | - 0.143 | 0.289 | 0.120 |
| \triangle | 0.103 | | |
| \diamond | 0.227 | | |

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|-------|
| ALPHAB | - 9.977 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

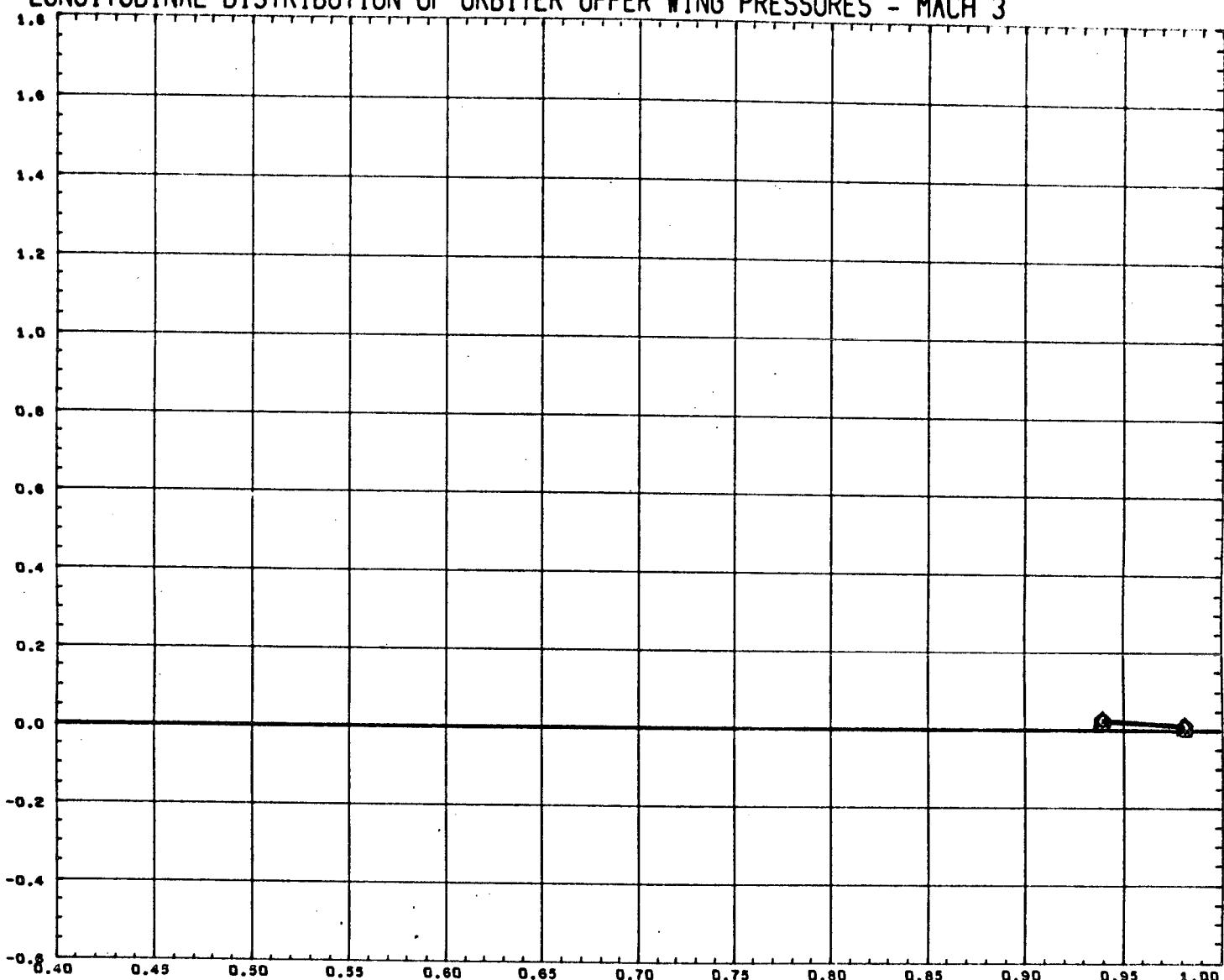
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| O | - 0.143 | 0.399 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 9.977 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

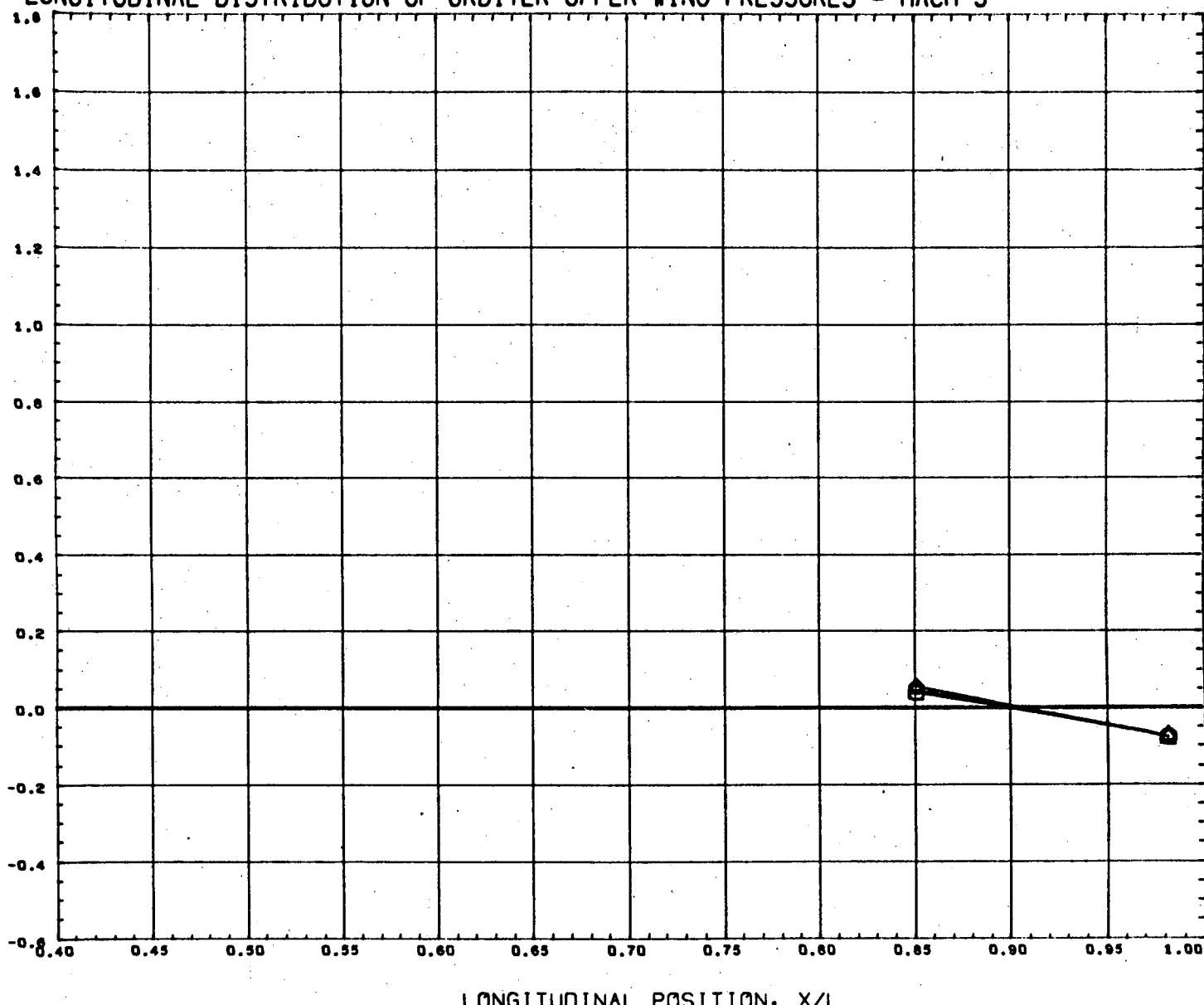
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| O | -0.144 | 0.269 | 0.151 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|-------|
| ALPHAB | -9.977 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

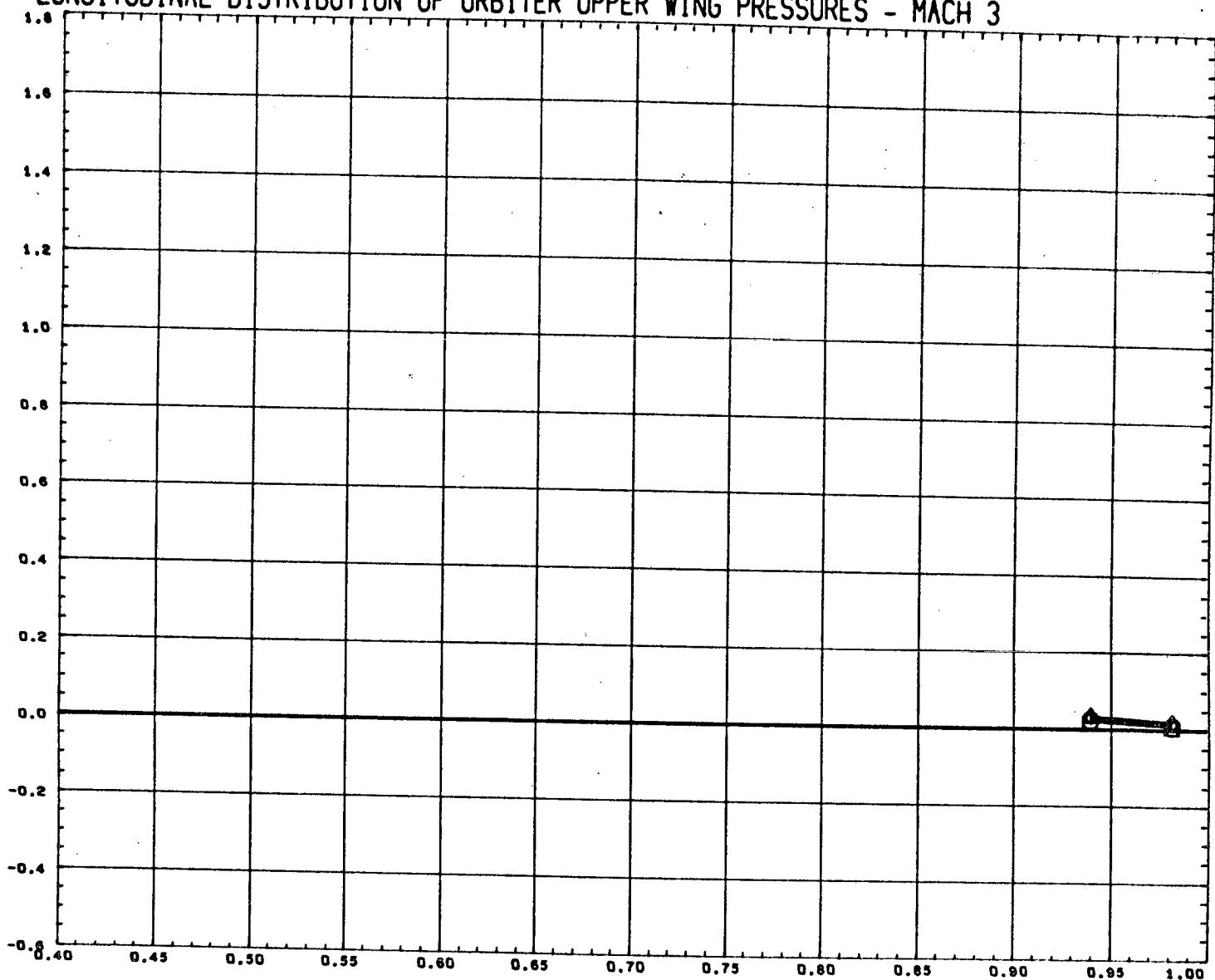
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/Z | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.144 | 0.399 | 0.151 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 9.977 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

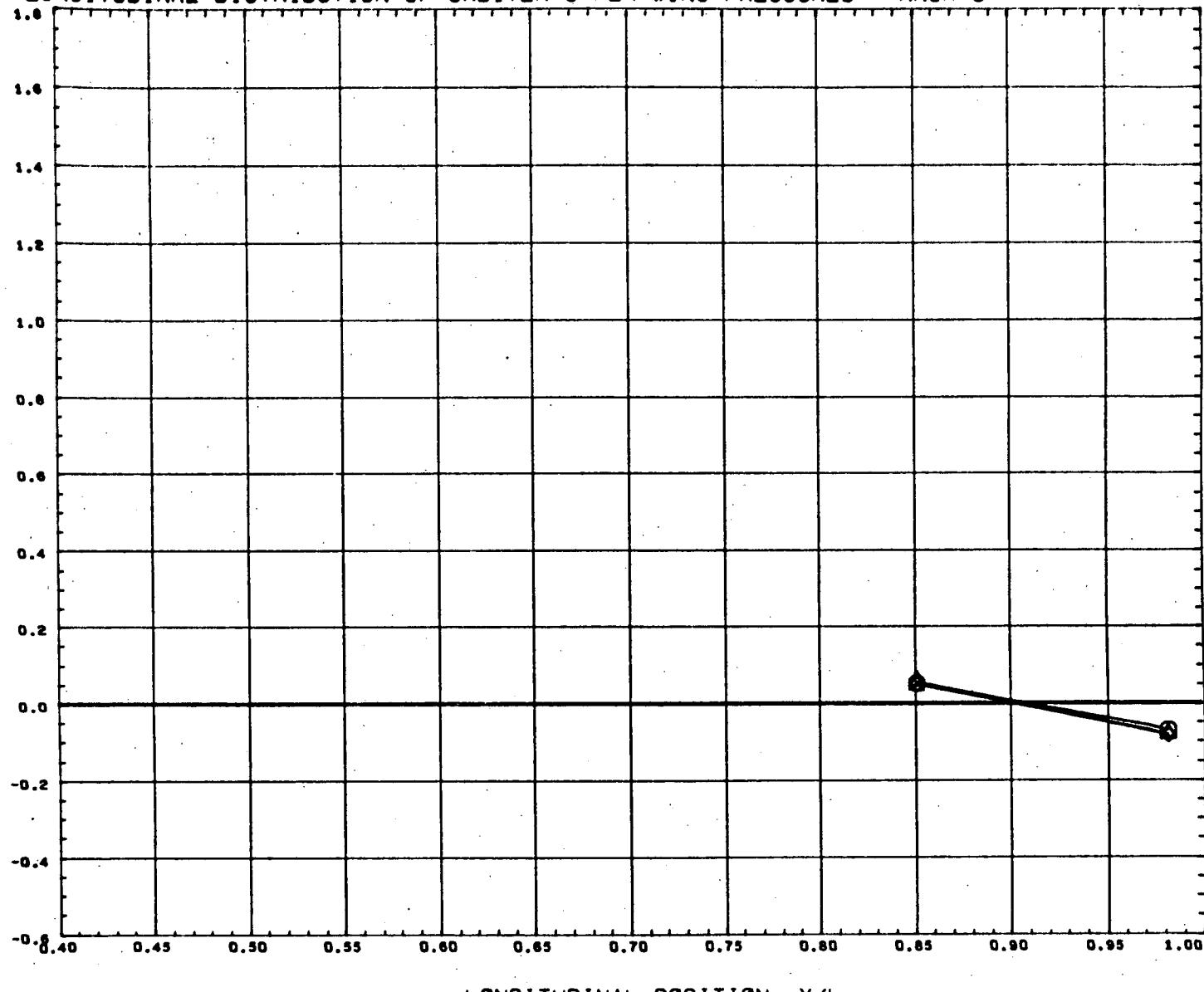
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8321•

PAGE 134

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| O | - 0.143 | 0.269 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 9.977 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

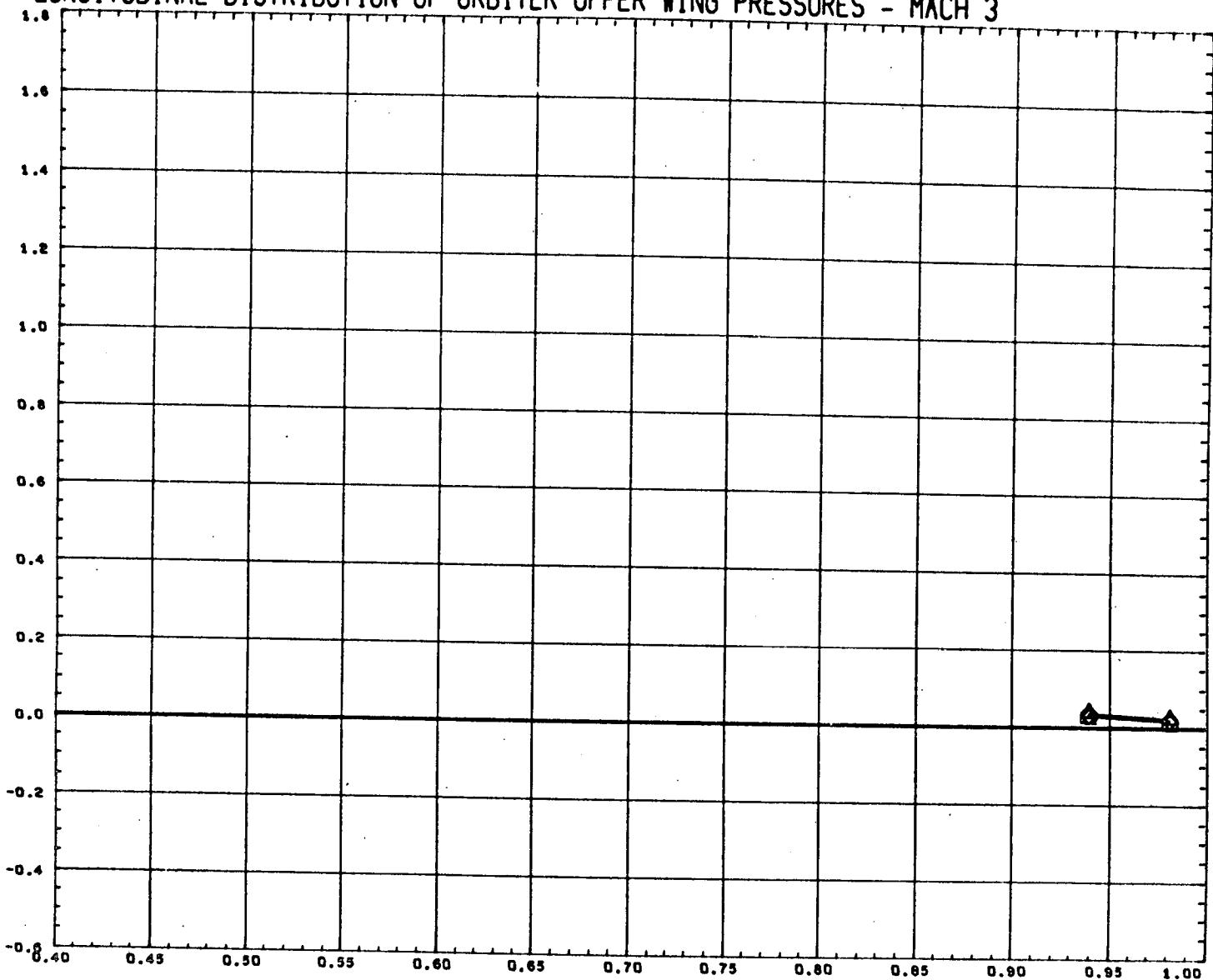
•GT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.143 | 0.399 | 0.226 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|-------|
| ALPHAB | - 9.977 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

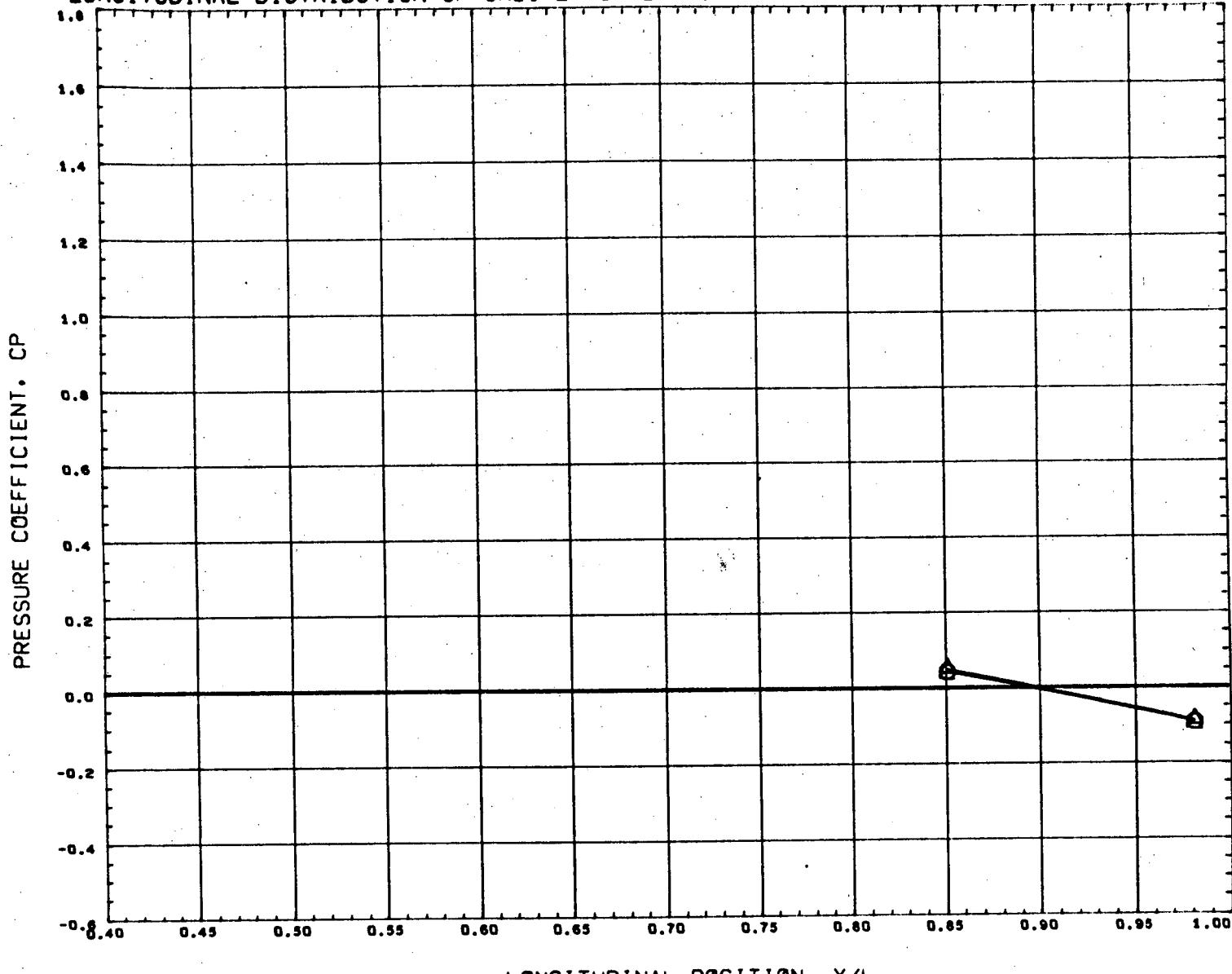
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8321•

PAGE 136

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| O | - 0.391 | 0.289 | 0.908 |
| △ | 0.516 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|-------|
| ALPHAB | - 9.977 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

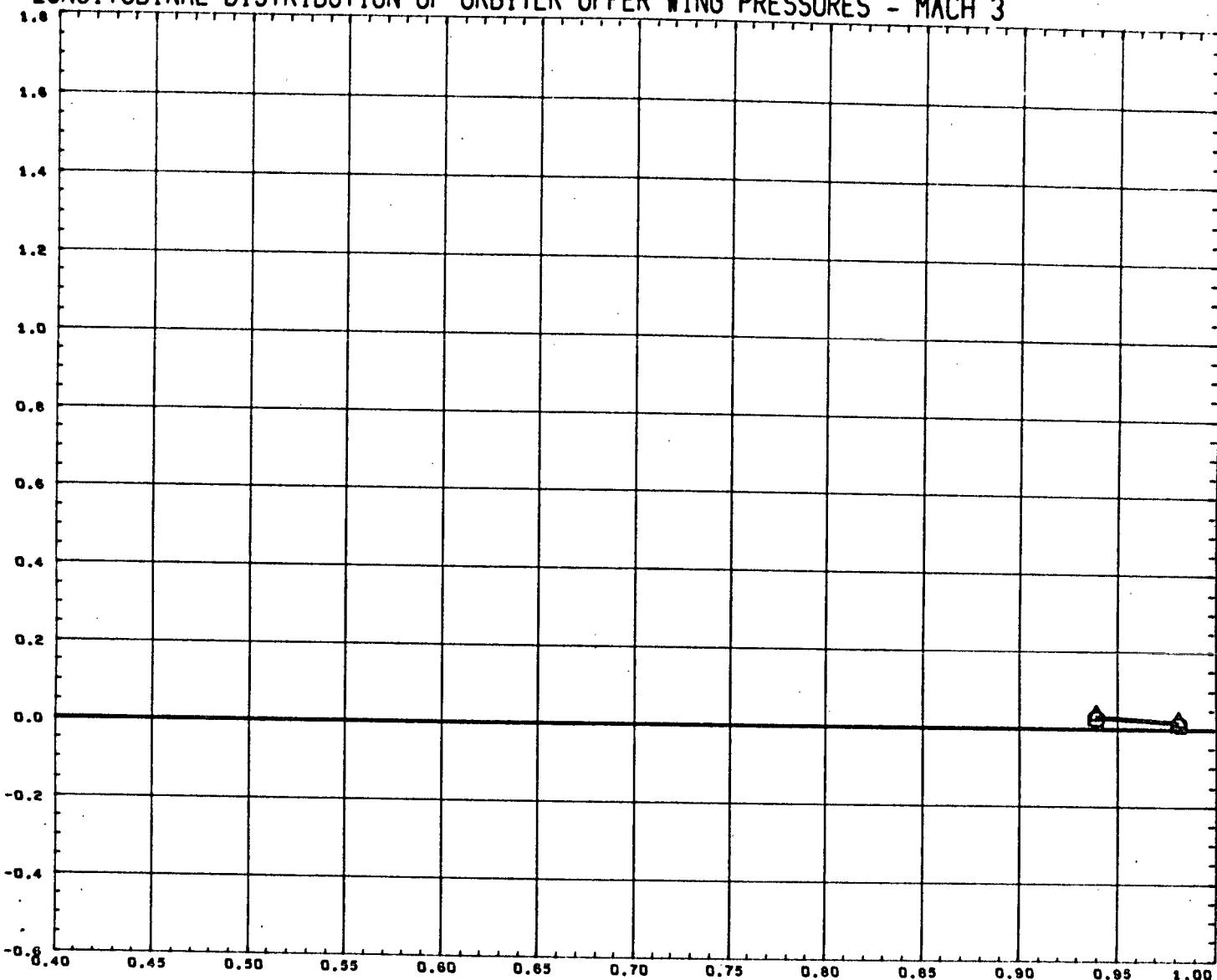
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8321•

PAGE 137

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX Y/B DELTAZ

○ 0.391 0.399 0.908

△ 0.516

PARAMETRIC VALUES

| | | | | |
|--------|---|-------|--------|-------|
| ALPHAB | = | 9.977 | MACH | 3.000 |
| ALPHAI | = | 0.000 | ORBPOW | 0.000 |
| BSTPOW | = | 0.000 | | |

REFERENCE FILE

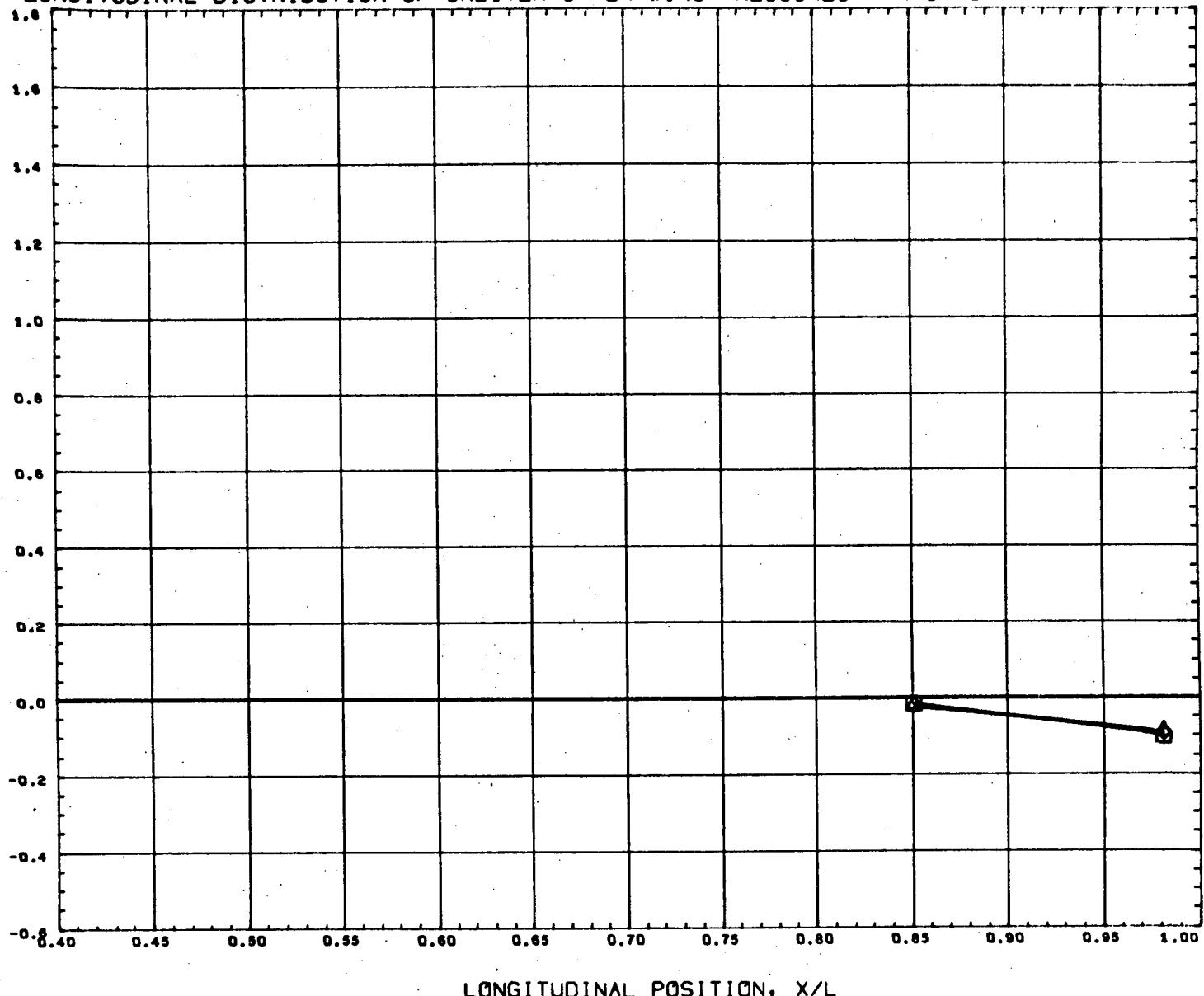
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 0.289 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 4.939 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| B8TPOW | 0.000 | |

REFERENCE FILE

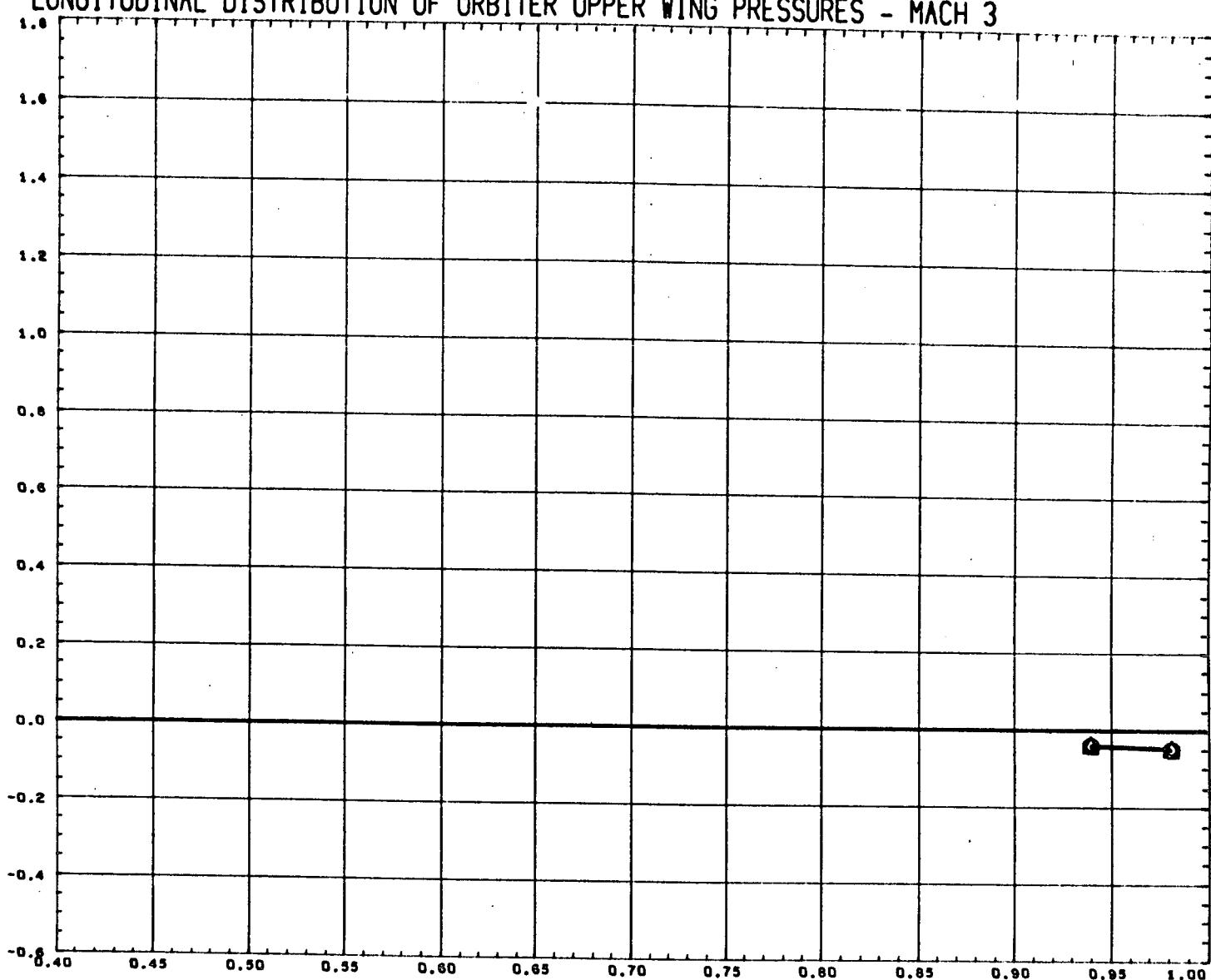
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8322•

PAGE 139

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

SYMBOL DELTAX Y/B DELTAZ

- - 0.143 0.399 0.120
- △ 0.103
- ◊ 0.226

PARAMETRIC VALUES

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|-------|
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

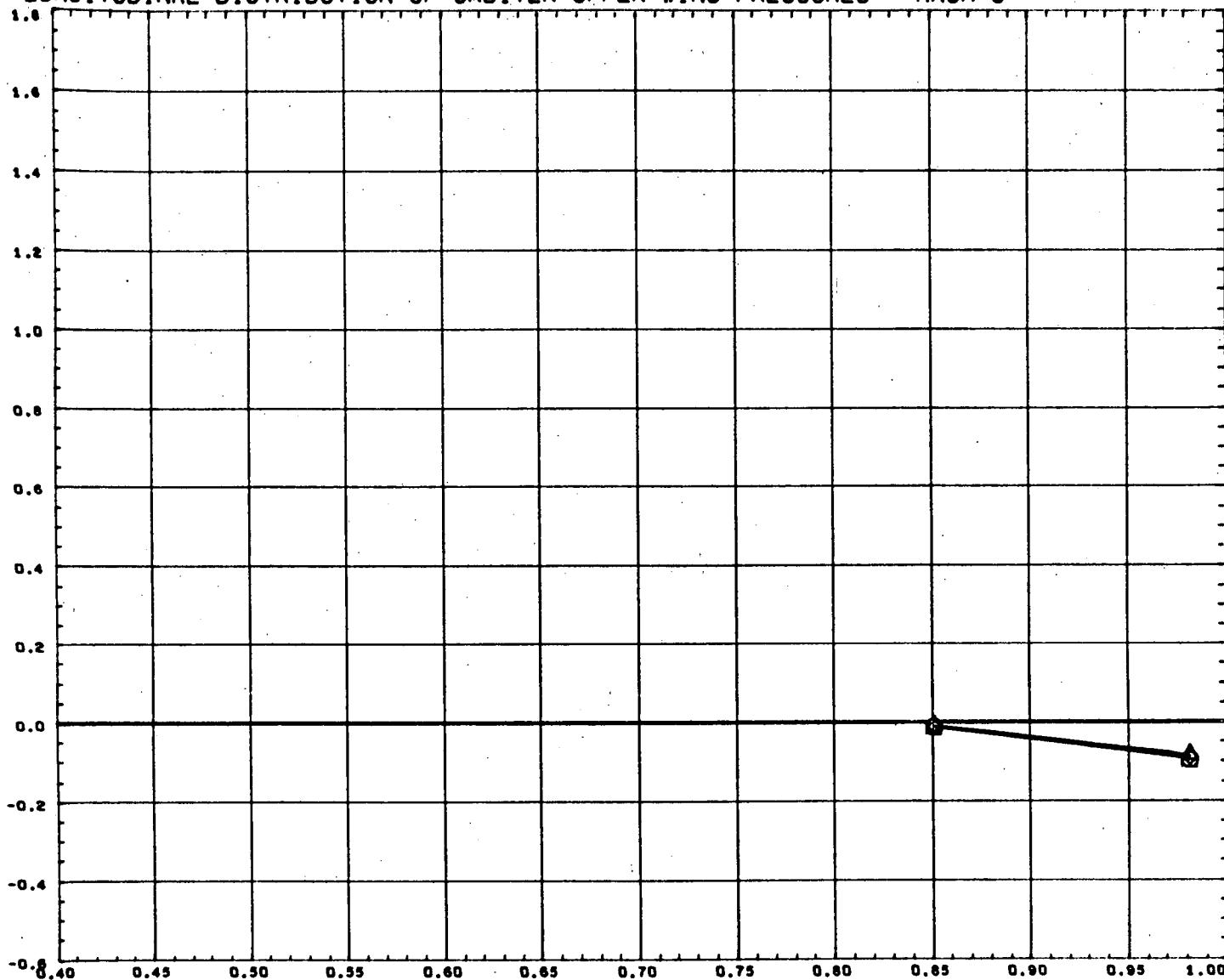
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8322•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| △ | - 0.144 | 0.289 | 0.151 |
| | 0.101 | | |
| ◊ | 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|-------|
| ALPHAB | - 4.939 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

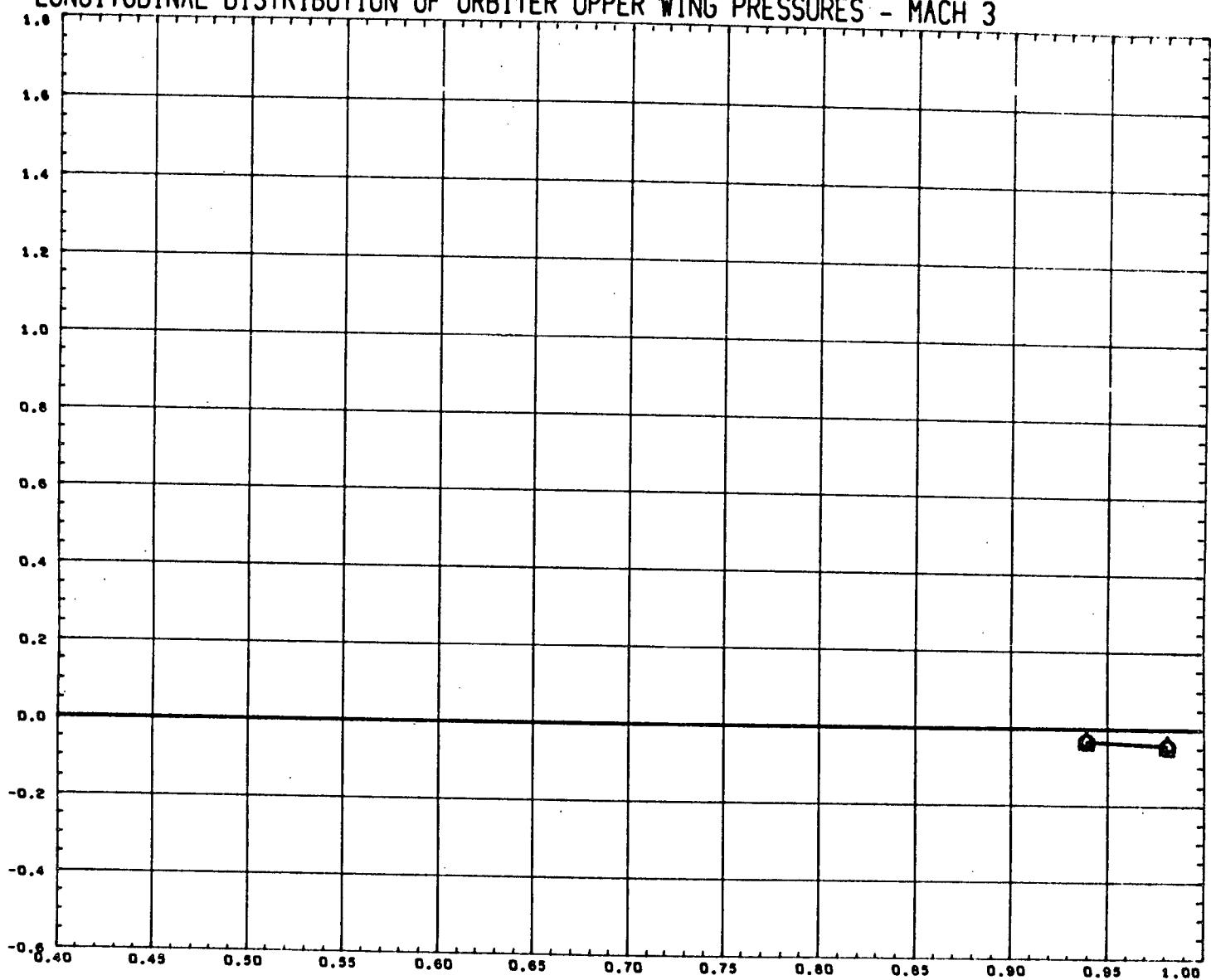
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8322•

PAGE 141

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ▷ | - 0.144 | 0.399 | 0.151 |
| ◊ | 0.101 | 0.226 | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 4.939 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

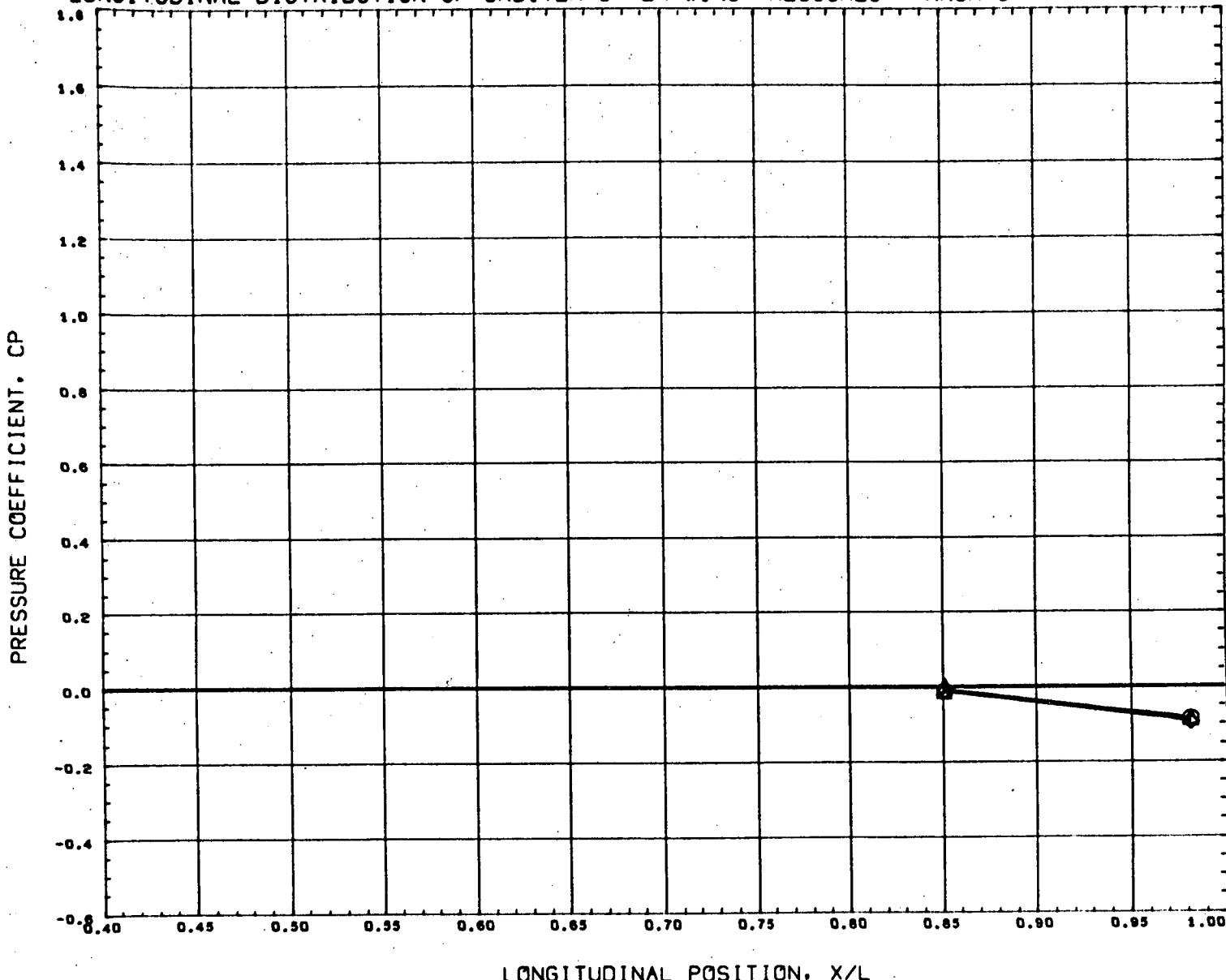
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8322•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



REFERENCE FILE

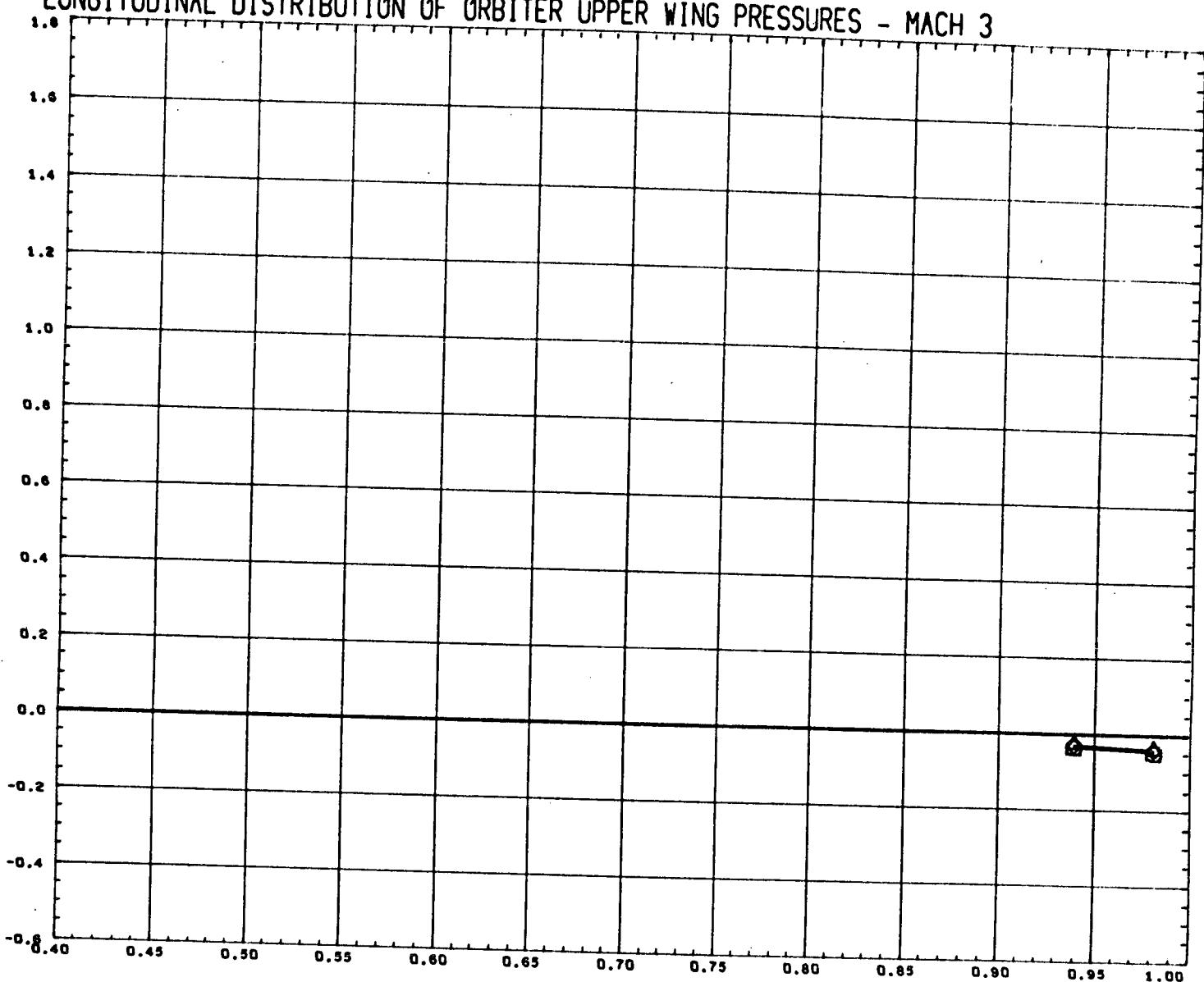
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8322•

PAGE 143

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 0.399 | 0.228 |
| △ | 0.104 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|-------|
| ALPHAB | - 4.939 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

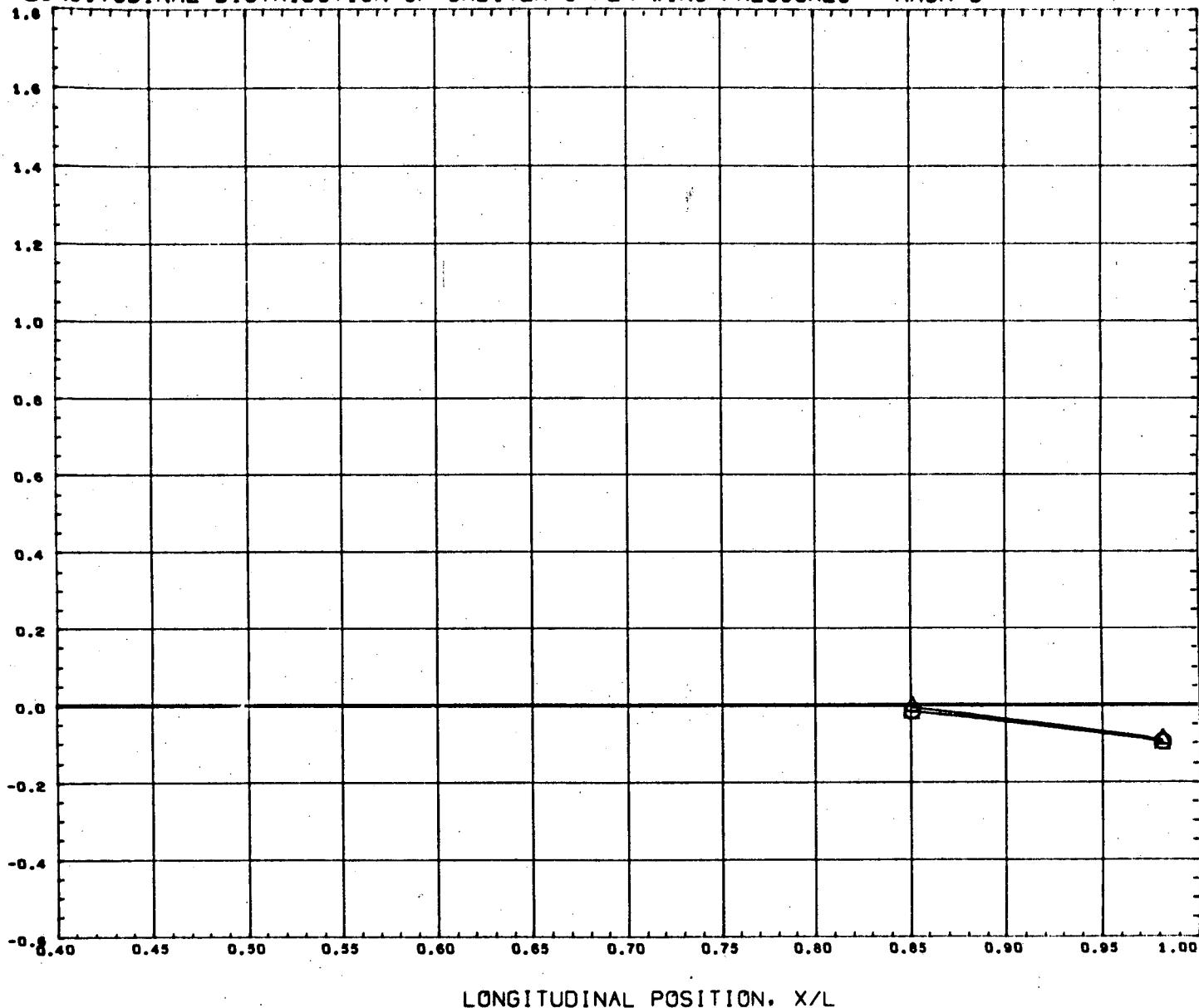
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8322•

PAGE 144

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION. X/L

SYMBOL DELTAX Y/B DELTAZ
 O - 0.391 0.289 0.908
 △ 0.516

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|-------|
| ALPHAB | - 4.939 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

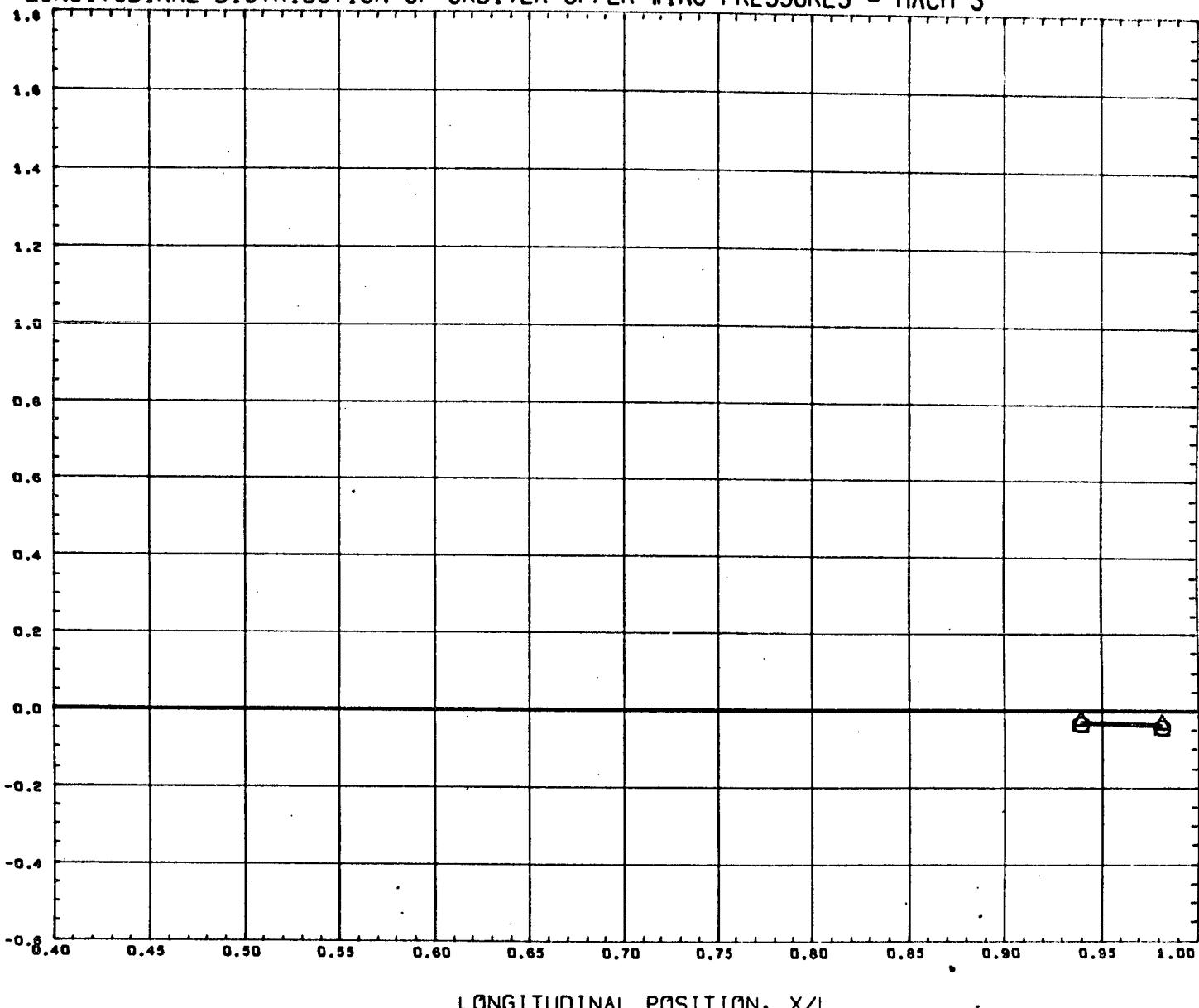
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8322•

PAGE 145

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

SYMBOL DELTAX Y/B DELTAZ

Δ - 0.391 0.399 0.908

\circ - 0.516

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|-------|
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

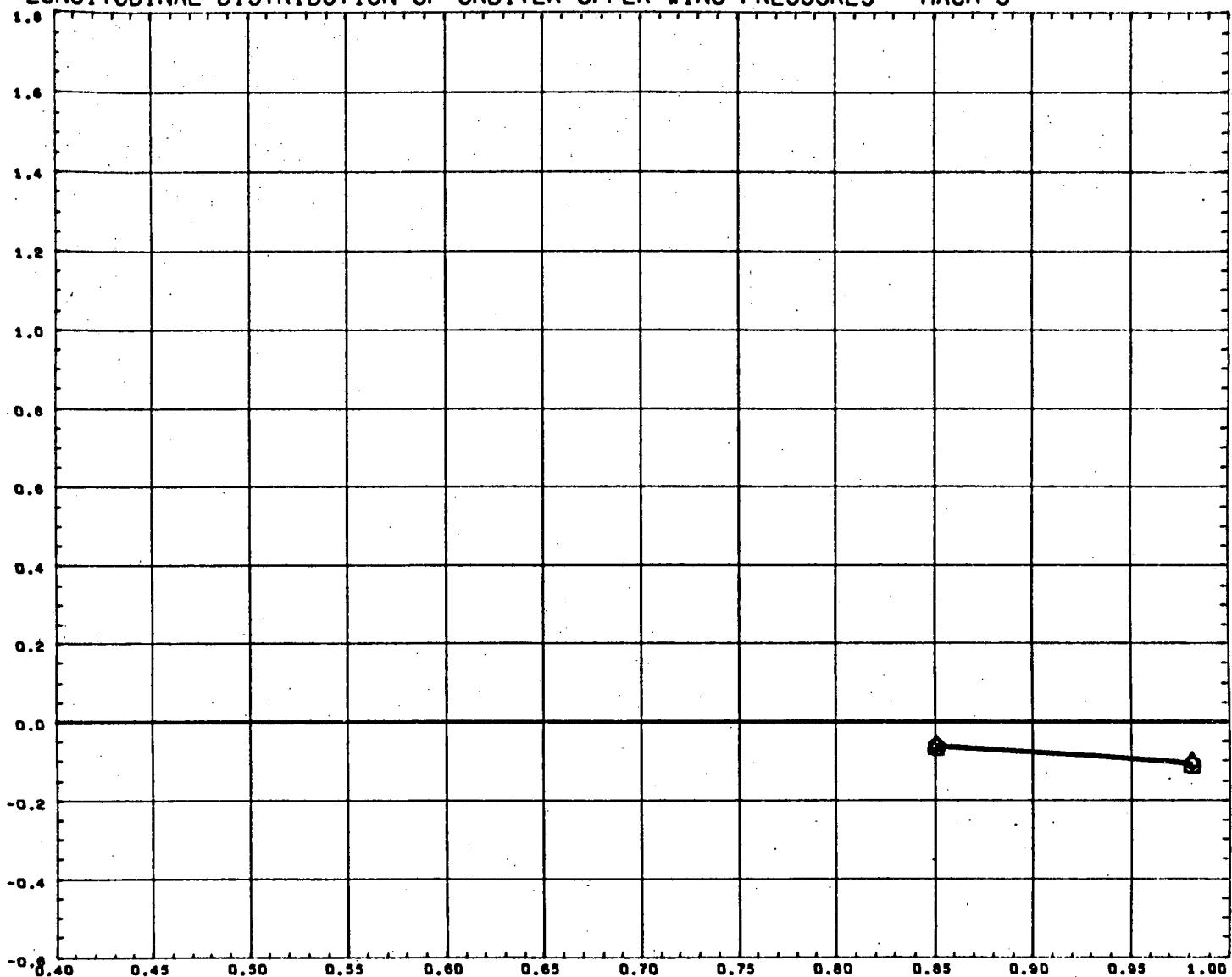
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8322•

PAGE 146

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| O | -0.143 | 0.289 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------------|
| ALPHAB | 0.019 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

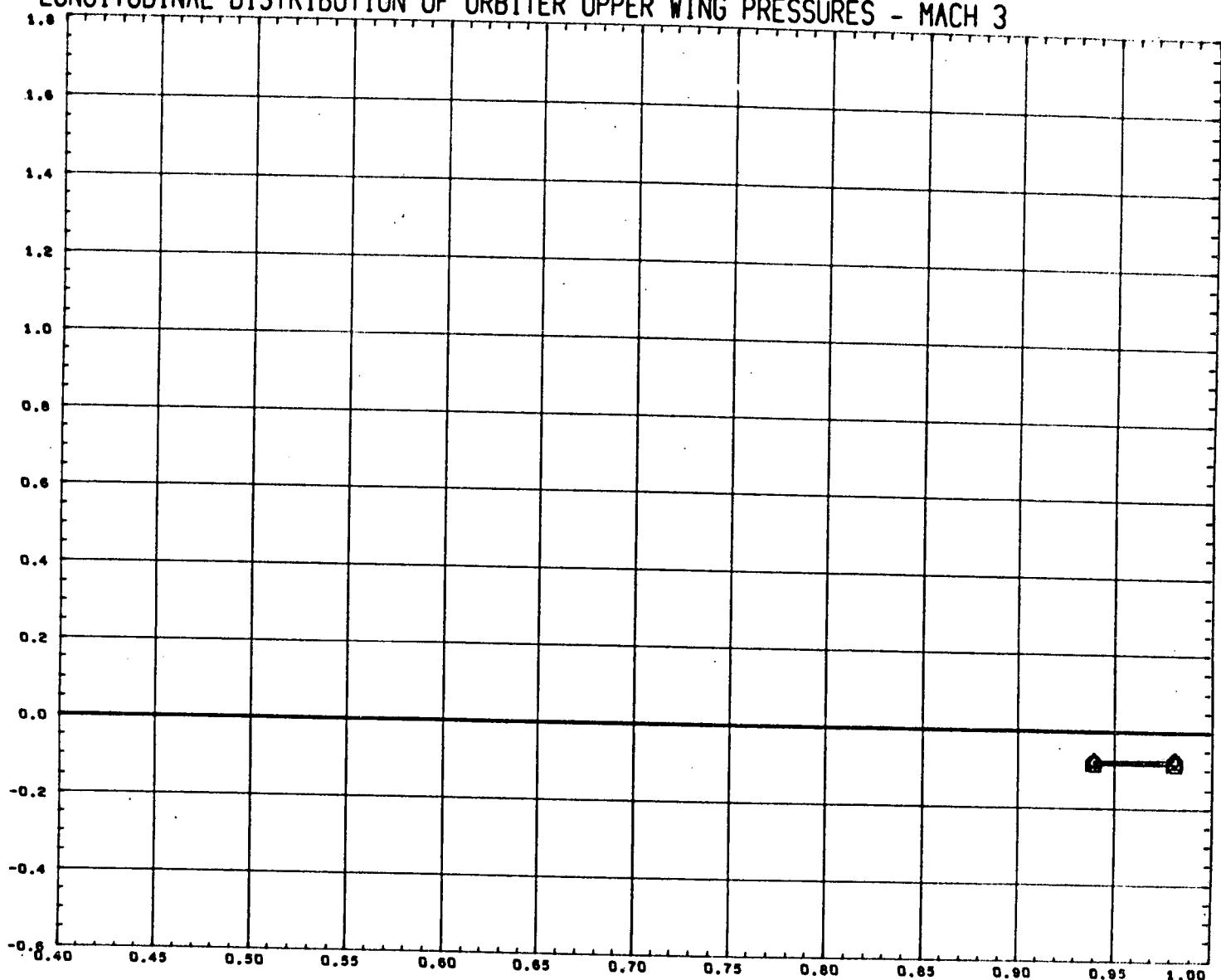
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8323•

PAGE 147

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

- - 0.143 0.399 0.120
- △ 0.103
- ◊ 0.226

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | | |
|-------------------|-------|--------|-------|
| ALPHAB | 0.019 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

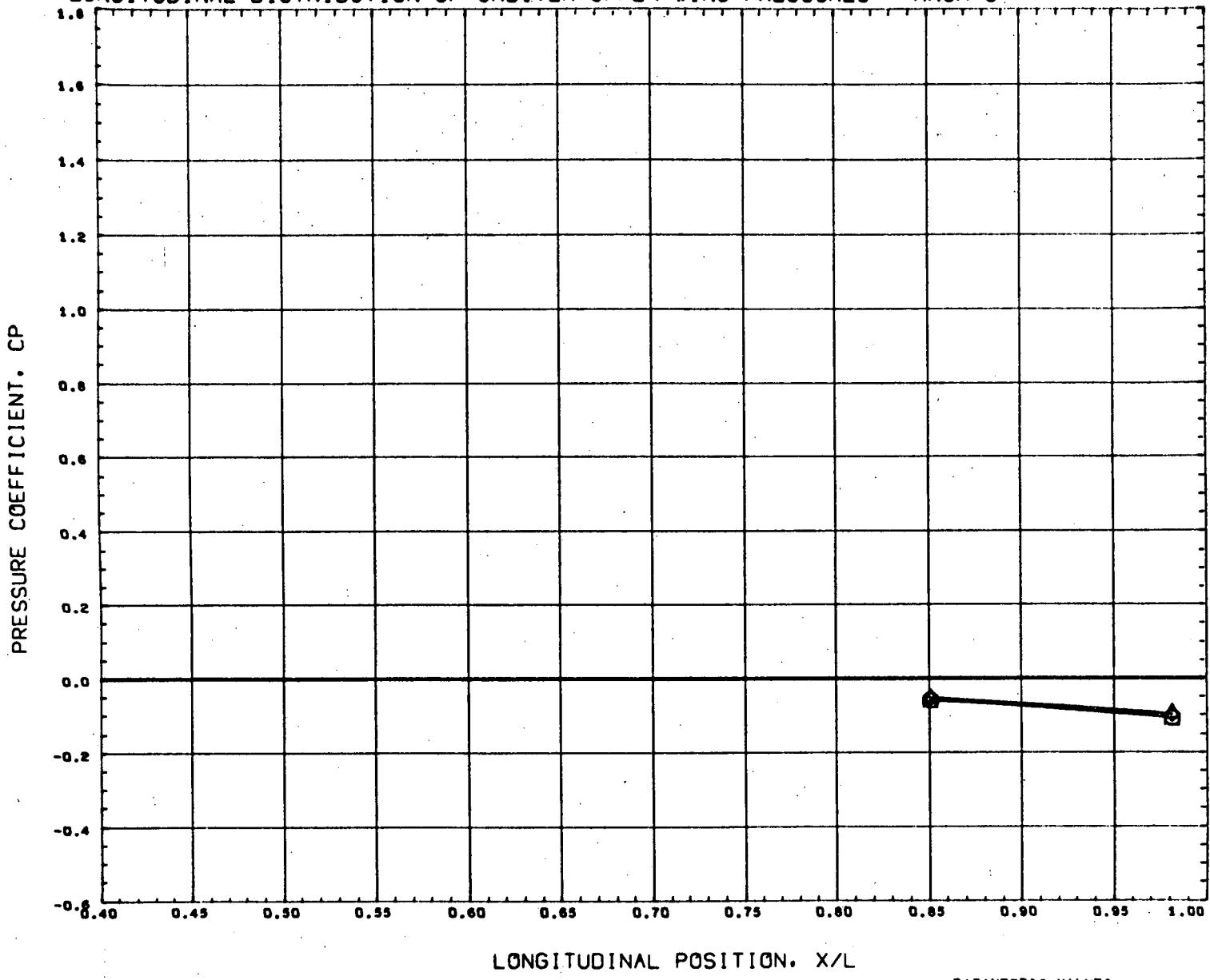
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AEDC VA1163 MOAC ORBITER (UPPER WING)

•GT8323•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



REFERENCE FILE

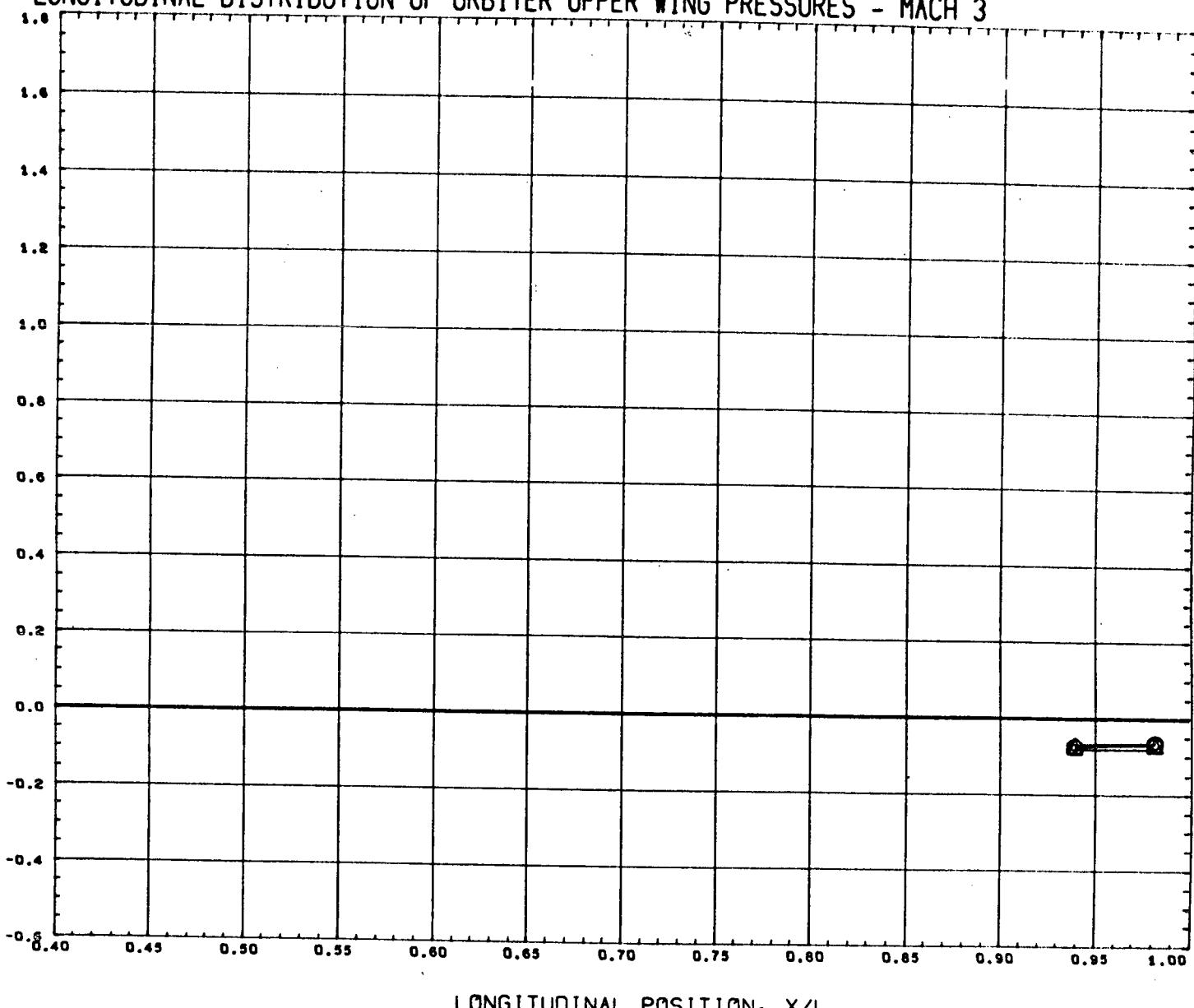
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8323•

PAGE 149

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|------------|--------|-------|--------|
| Δ | - | 0.144 | 0.399 |
| | | 0.104 | 0.151 |
| \diamond | | 0.227 | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------------|
| ALPHAB | 0.019 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

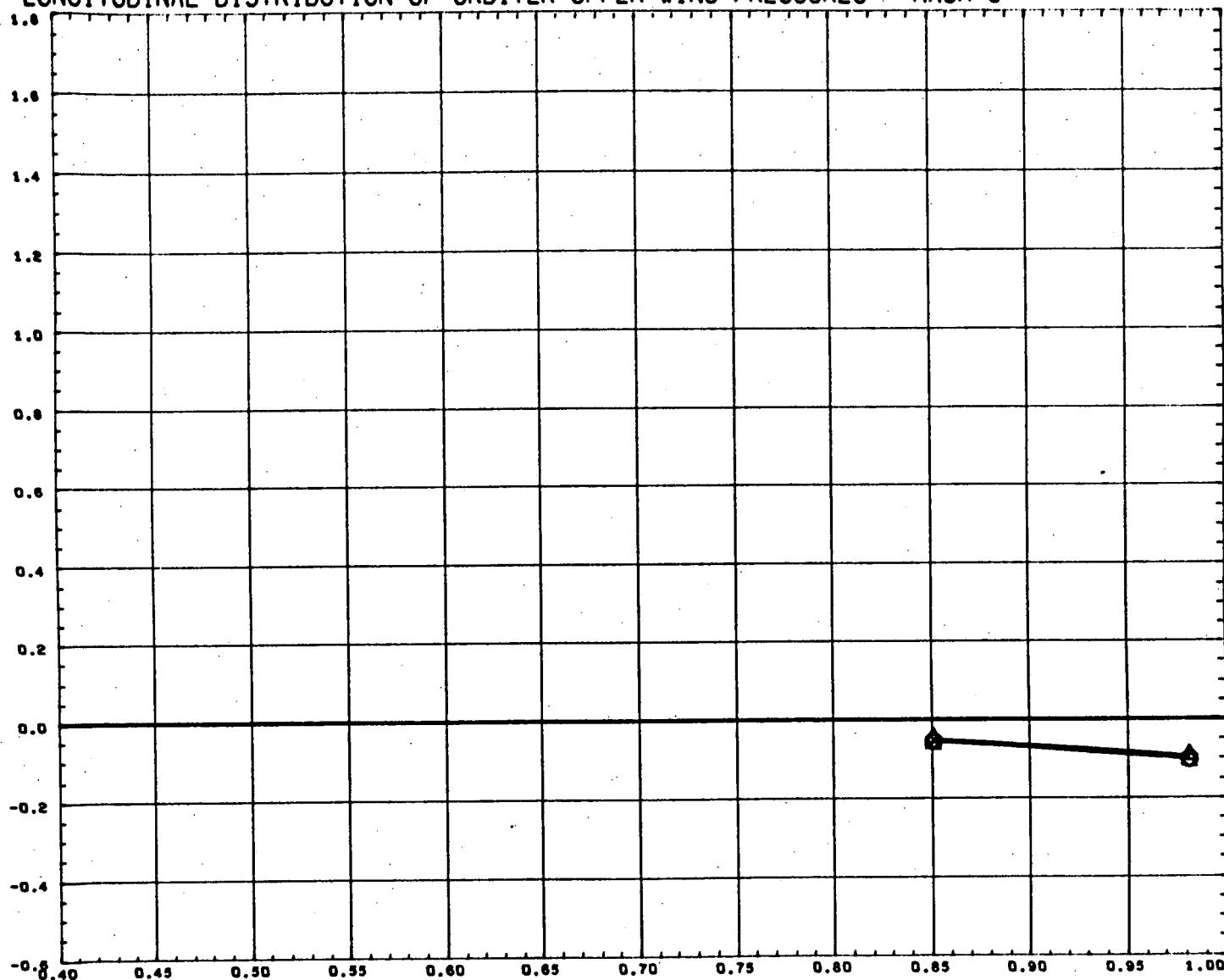
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8323•

PAGE 150

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.143 | 0.269 | 0.226 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------------|
| ALPHAB | 0.019 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

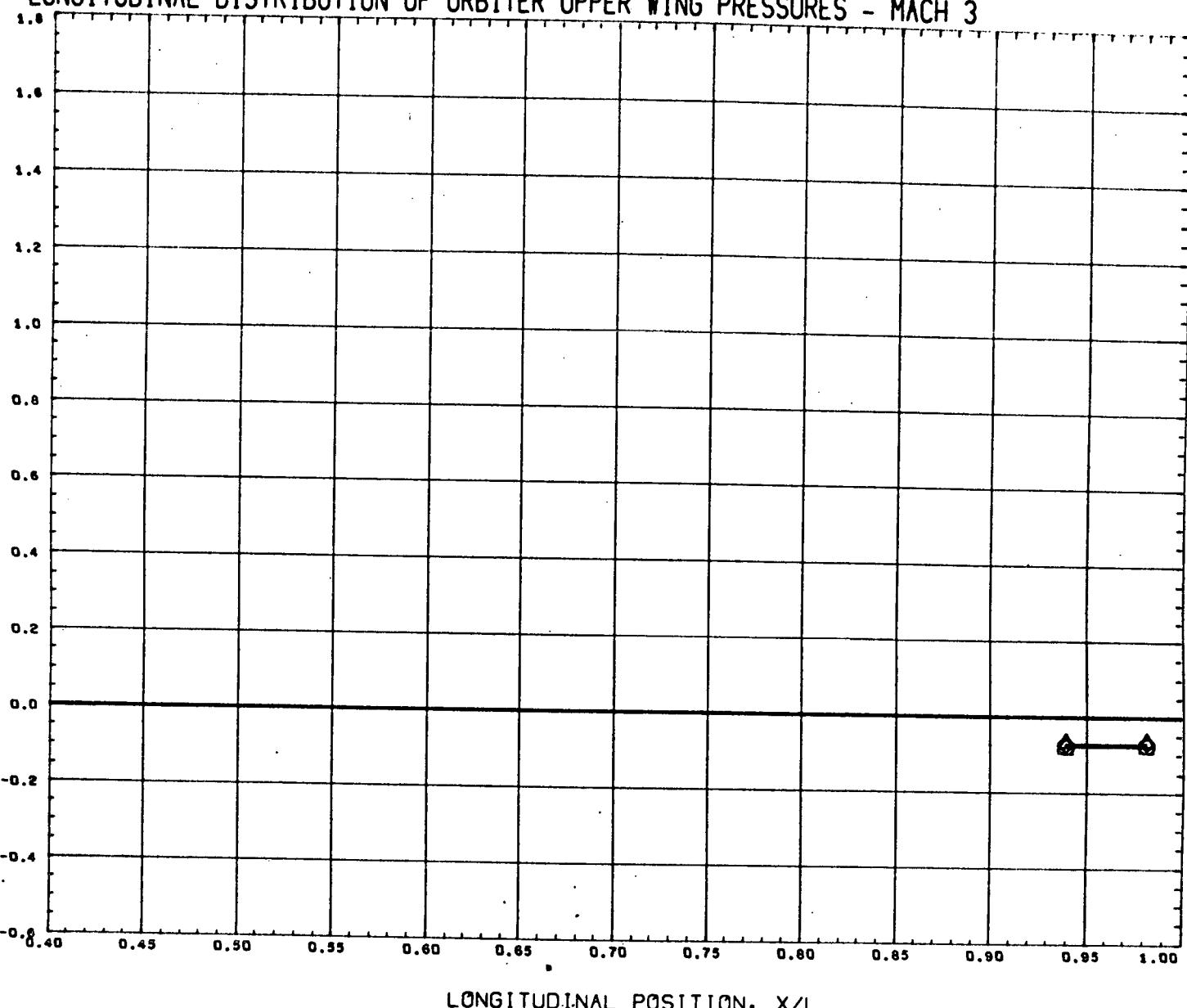
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8323•

PAGE 151

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ○ | - | 0.143 | 0.399 |
| △ | | 0.103 | 0.226 |
| ◊ | | 0.227 | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------------|
| ALPHAB | 0.019 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

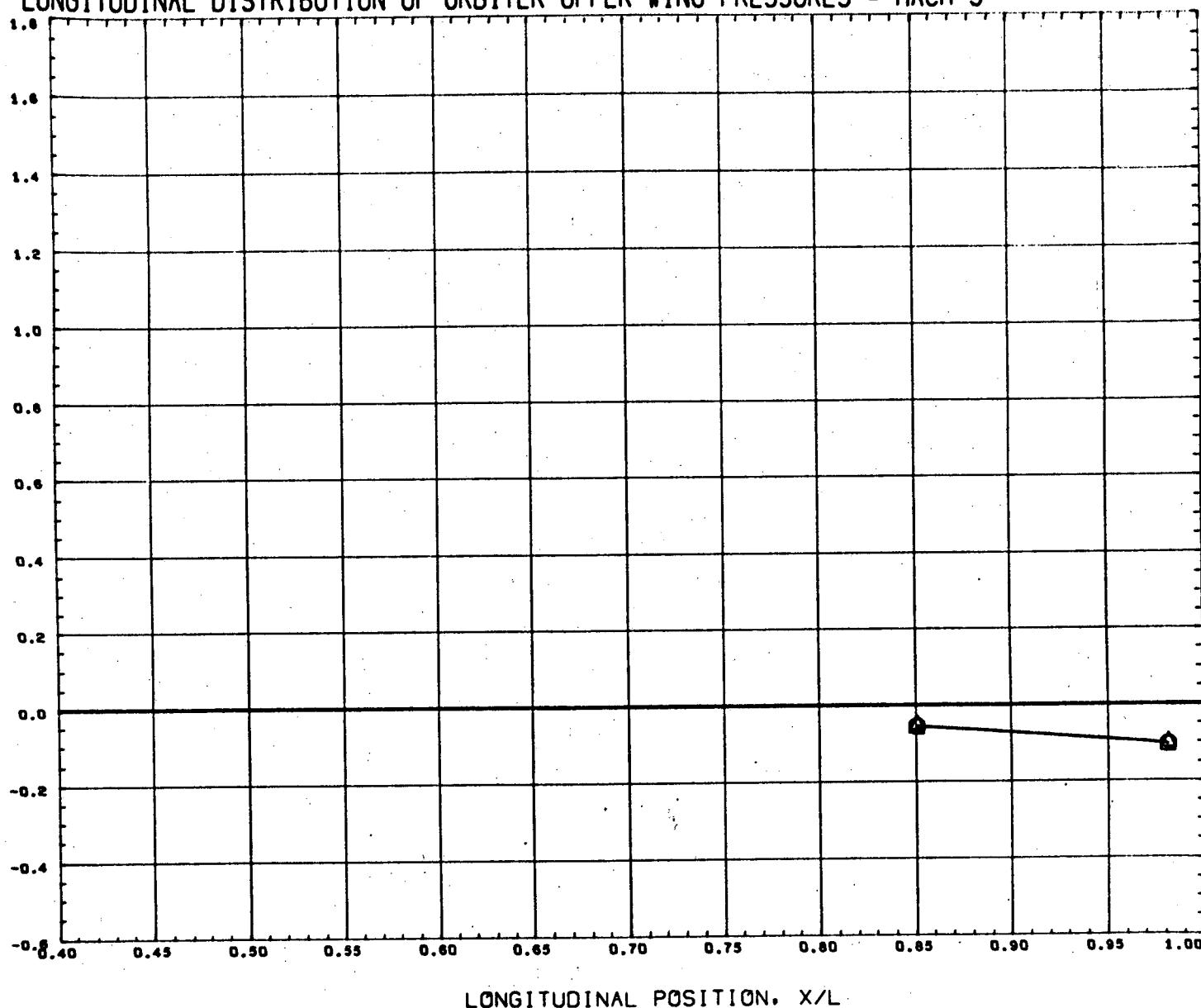
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8323•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX Y/B DELTAZ
 O 0.391 0.289 0.908
 Δ 0.514

LONGITUDINAL POSITION. X/L

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|-------|
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

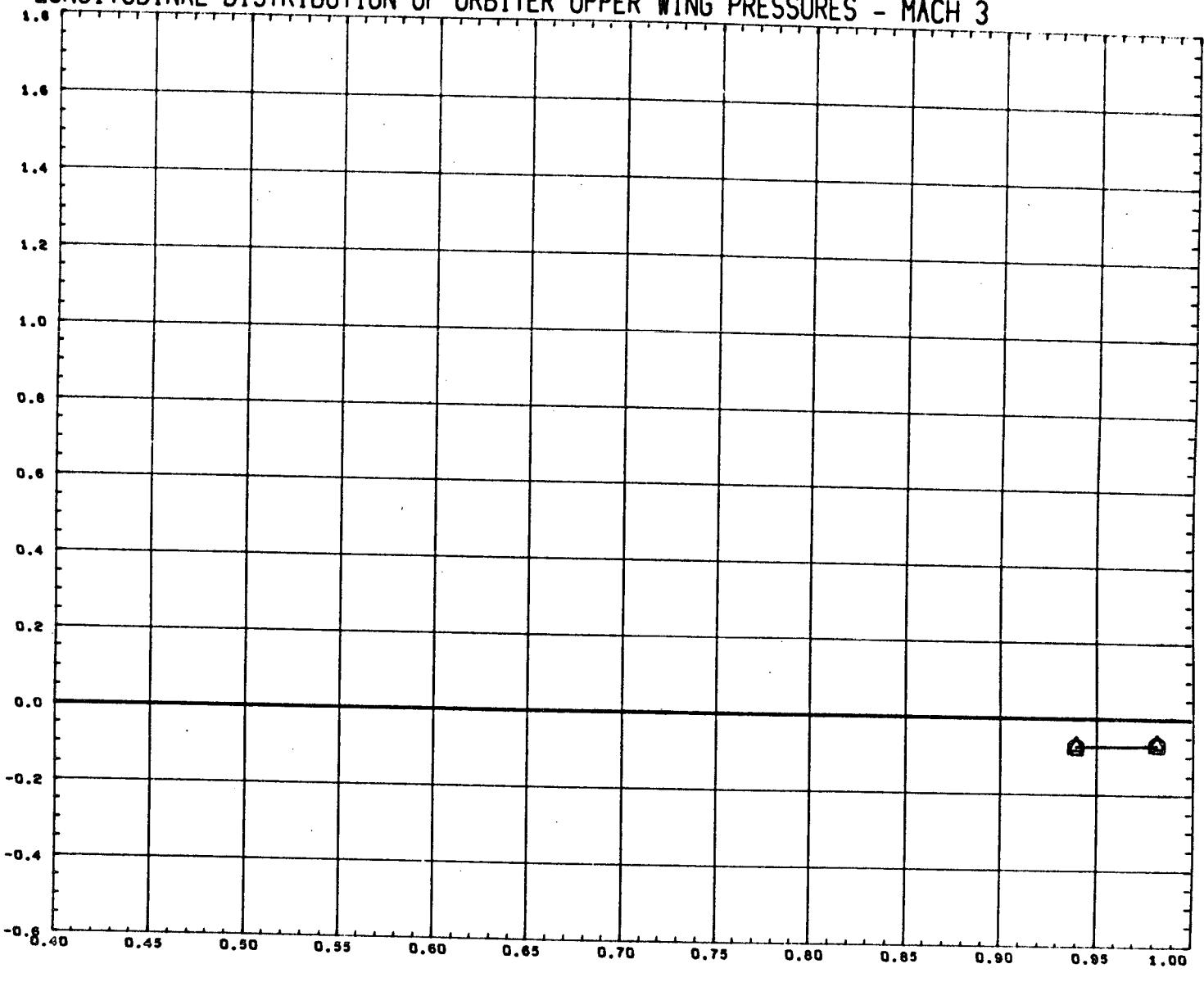
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8323•

PAGE 153

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

SYMBOL DELTAX Y/B DELTAZ
 ○ - 0.391 0.399 0.908
 △ 0.514

| | ALPHAB | MACH | 3.000 |
|--|--------|--------|-------|
| | ALPHAI | ORBPOW | 0.000 |
| | BSTPOW | 0.000 | |

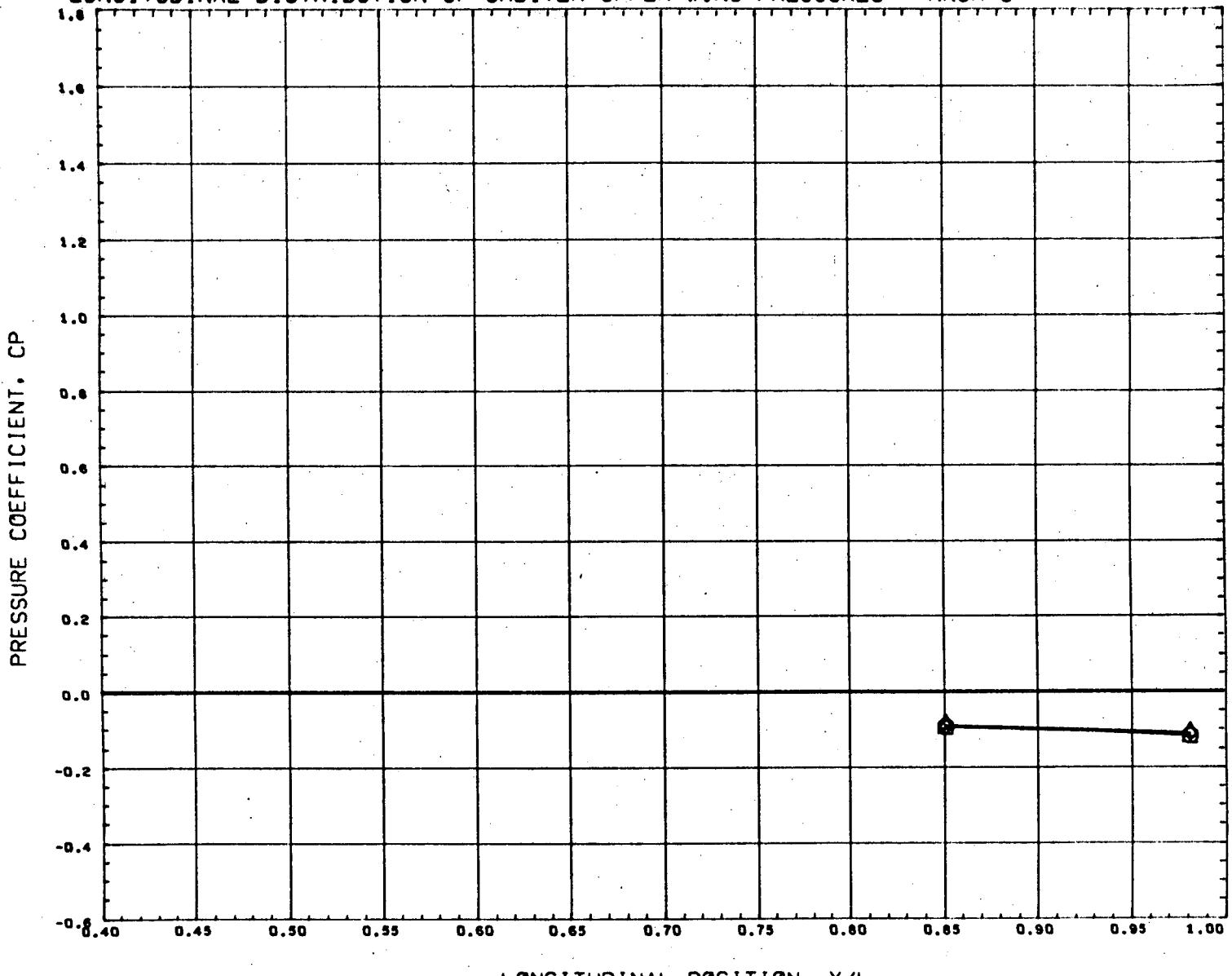
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AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8323•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



REFERENCE FILE

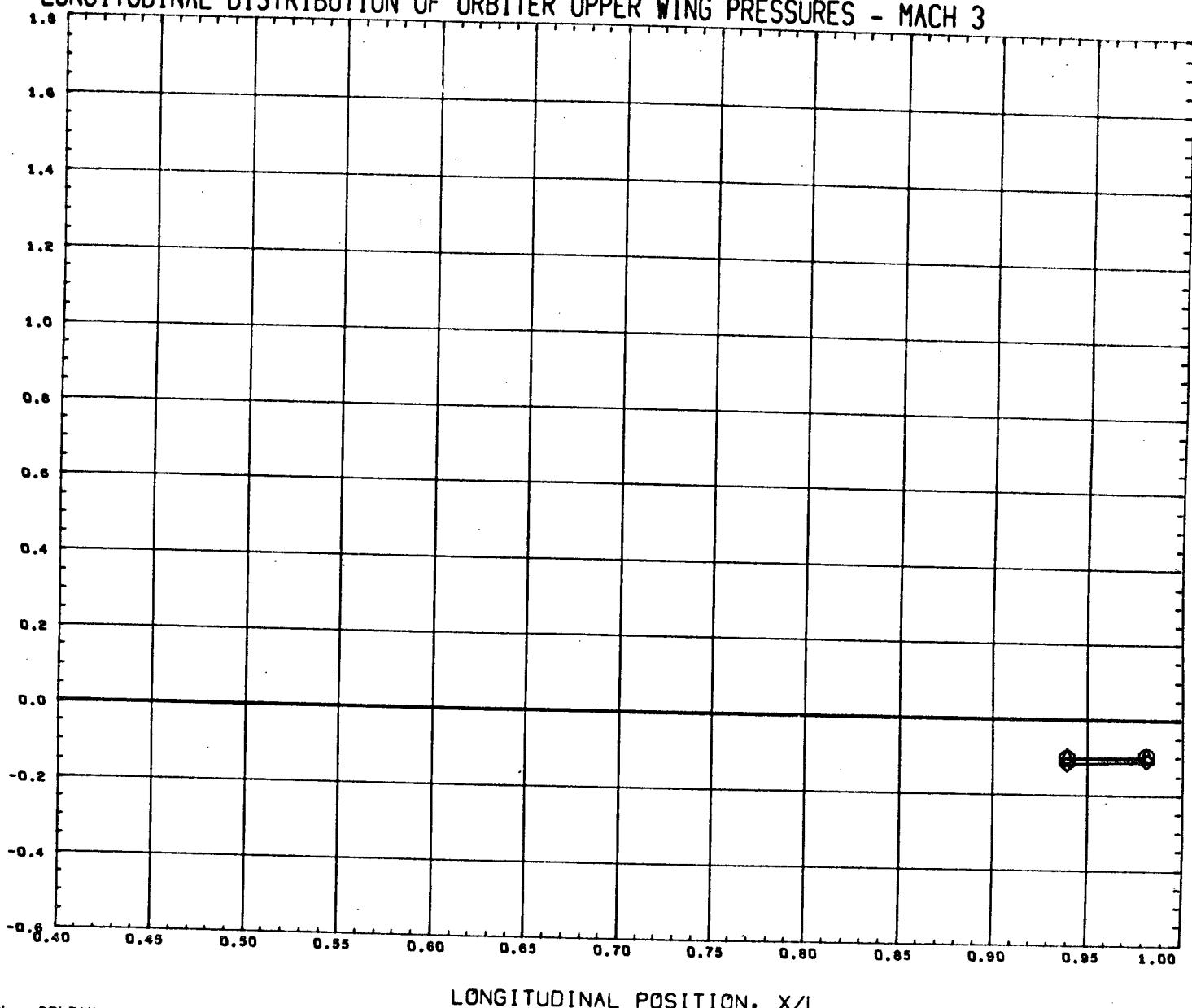
AEDC VA1163 MOAC ORBITER (UPPER WING)

•GT8324•

PAGE 155

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| △ | - 0.143 | 0.399 | 0.120 |
| ○ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|-------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

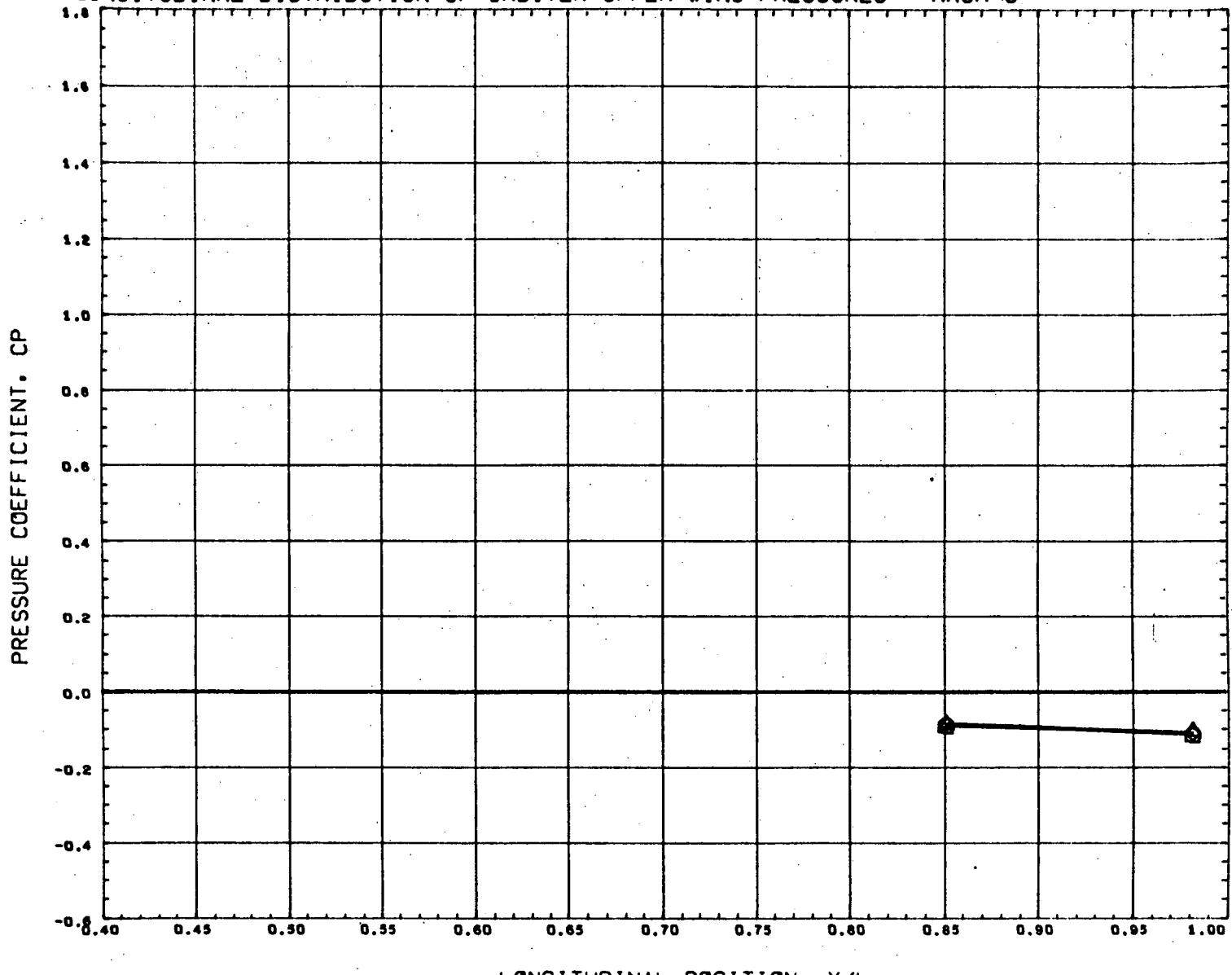
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8324•

PAGE 156

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



REFERENCE FILE

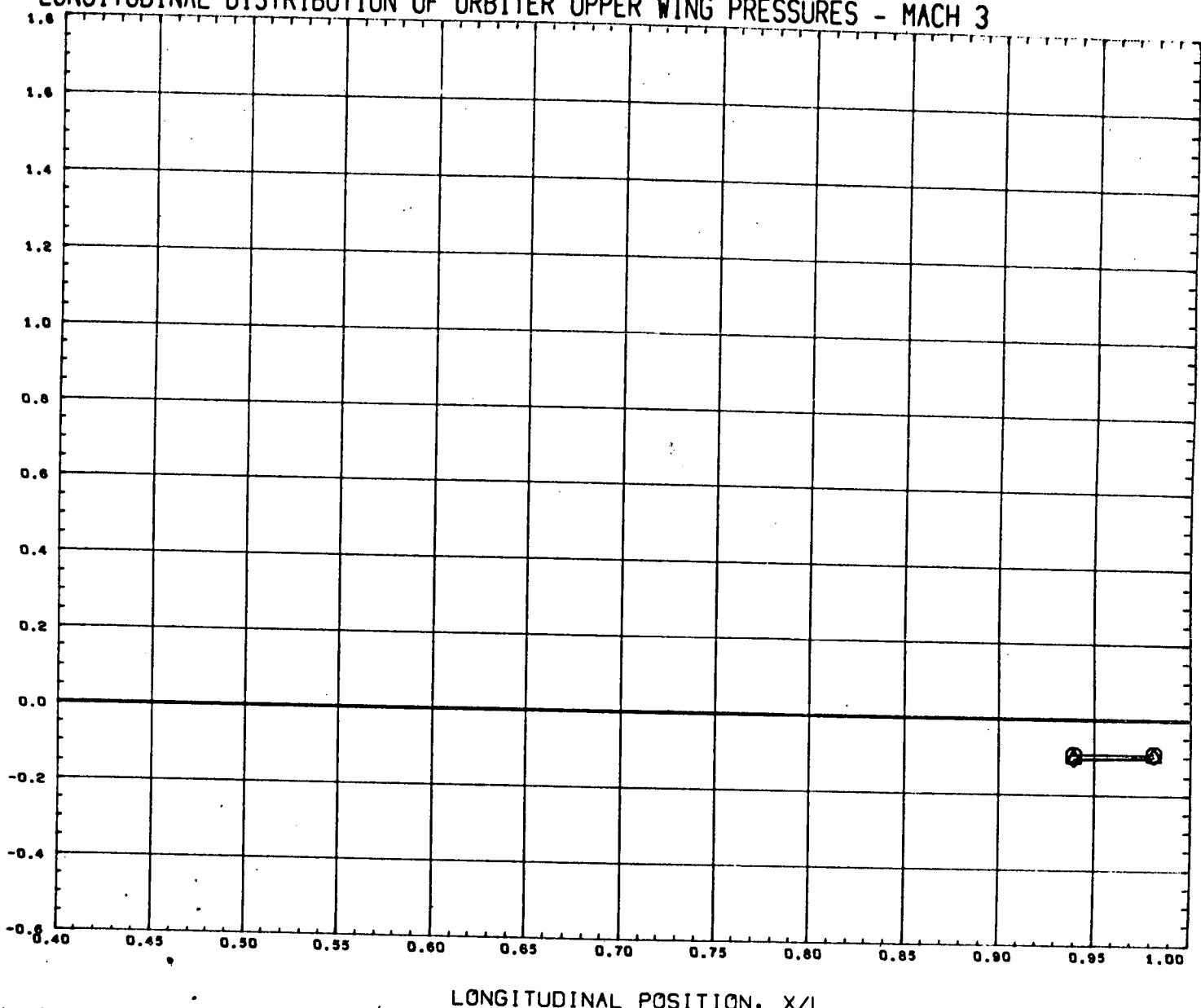
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8324•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.143 | 0.399 | 0.151 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | | |
|-------------------|-------|--------|-------|
| ALPHAB | 5.020 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

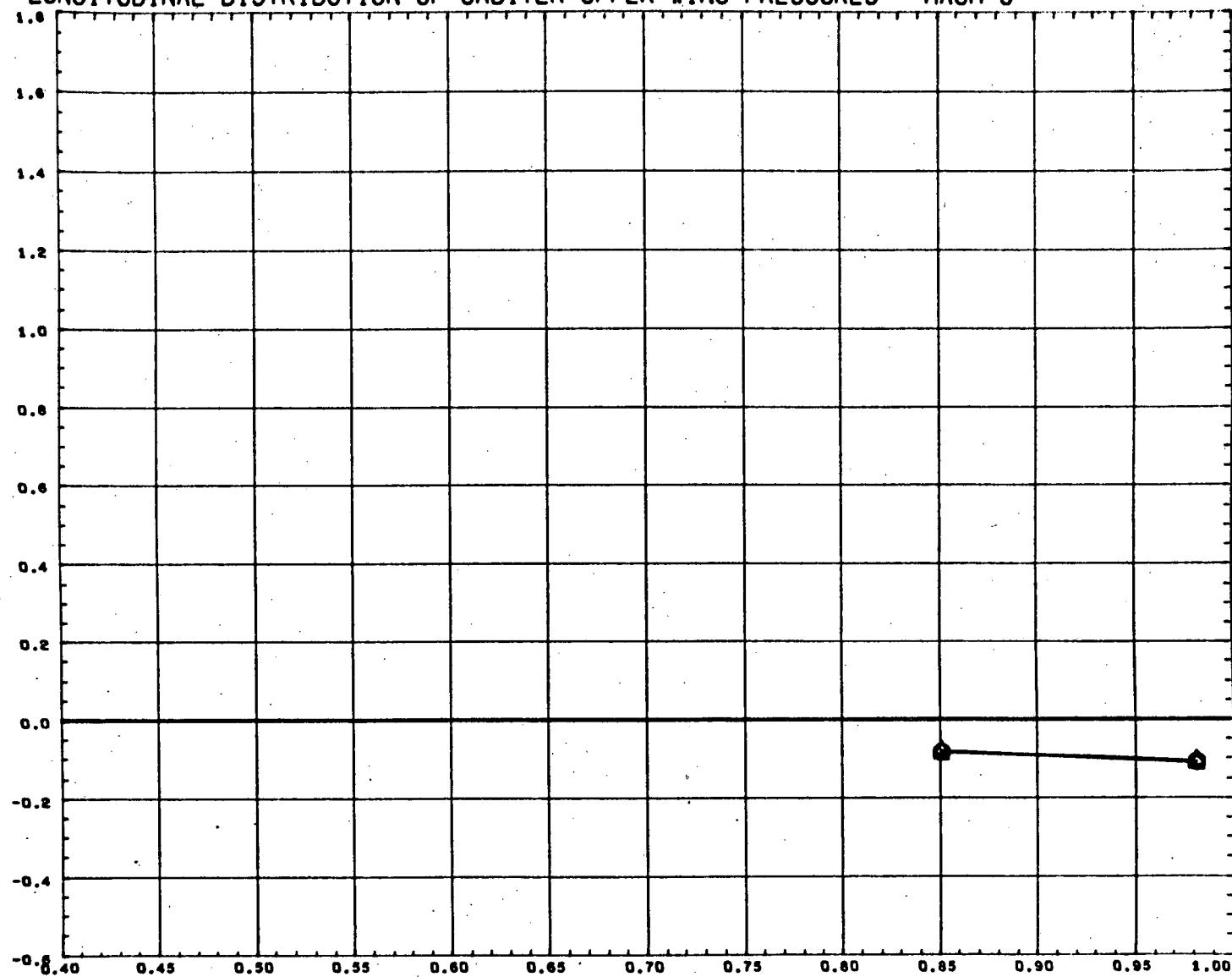
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8324•

PAGE 158

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DETAZ |
|--------|---------|-------|-------|
| △ | - 0.143 | 0.269 | 0.228 |
| ○ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------|
| ALPHAB | 5.020 | MACH |
| ALPHAI | 0.000 | ORBPOW |
| BSTPOW | 0.000 | |

REFERENCE FILE

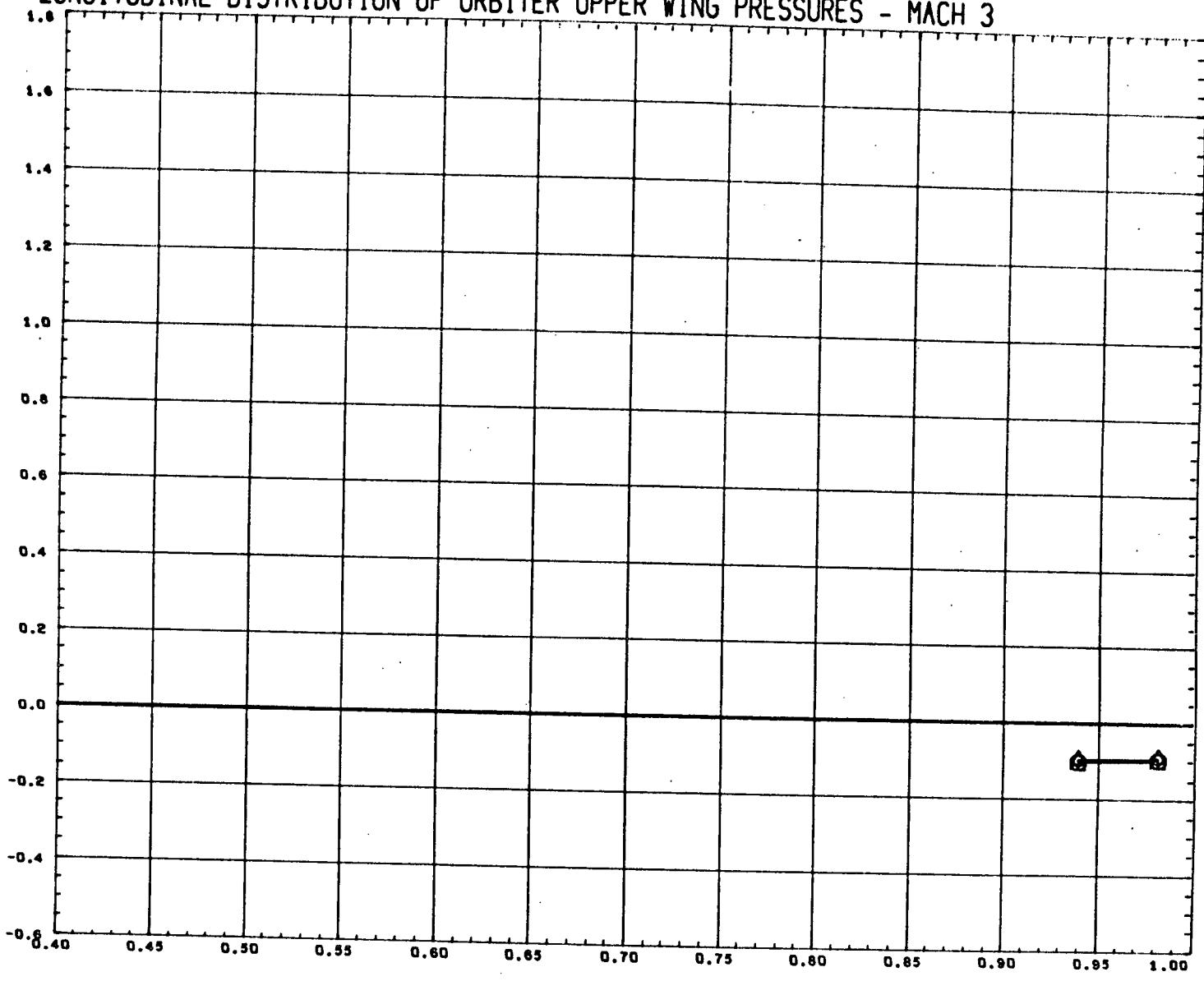
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8324•

PAGE 159

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ○ | -0.143 | 0.399 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.228 | | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------|
| ALPHAB | 5.020 | MACH |
| ALPHAT | 0.000 | ORBPOW |
| BSTPOW | 0.000 | |

REFERENCE FILE

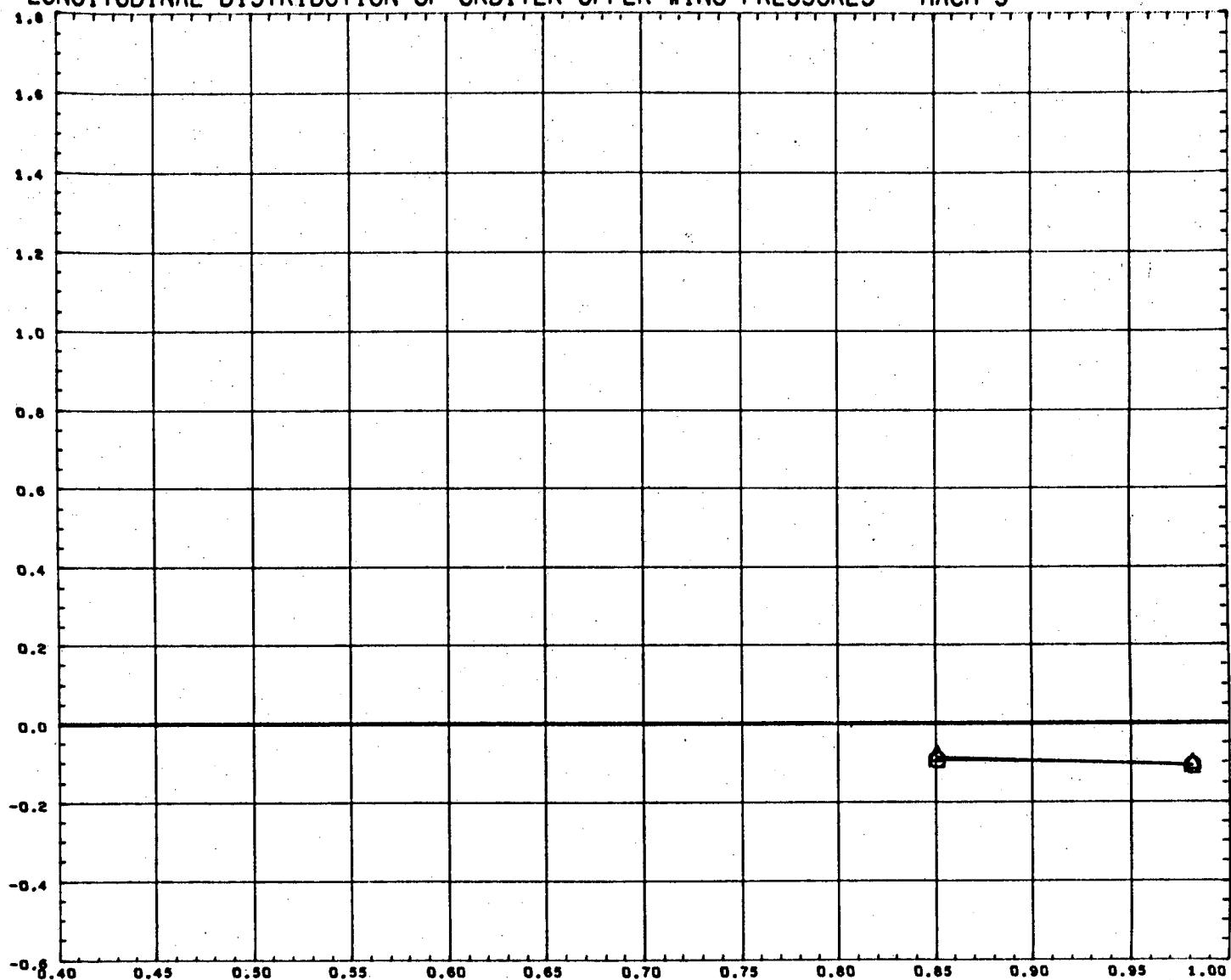
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8324•

PAGE 160

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|------------------|-------|--------|
| O | - 0.390 0.511 | 0.289 | 0.908 |

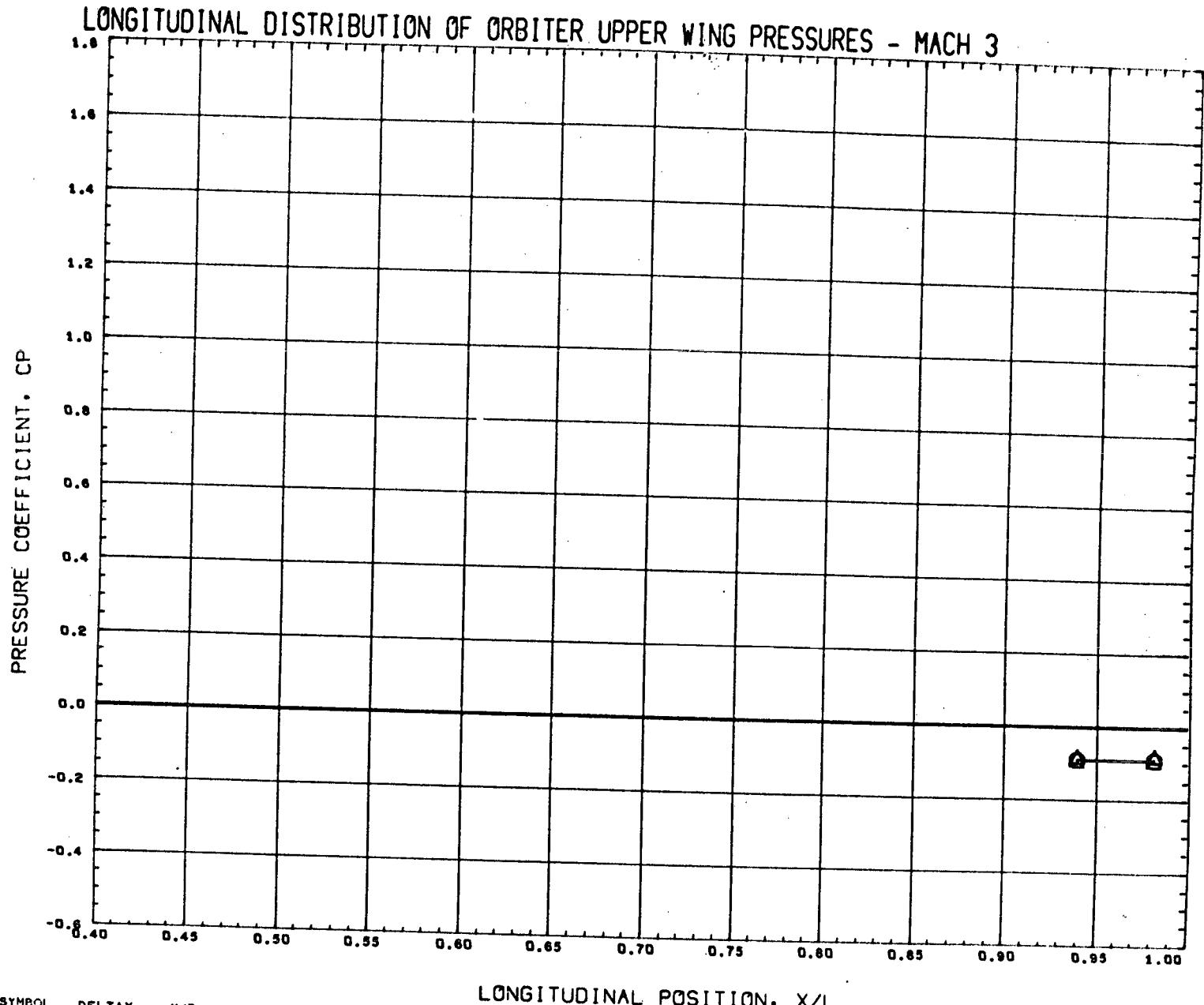
| PARAMETRIC VALUES | | |
|-------------------|-------|--------------|
| ALPHAB | 5.020 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8324•

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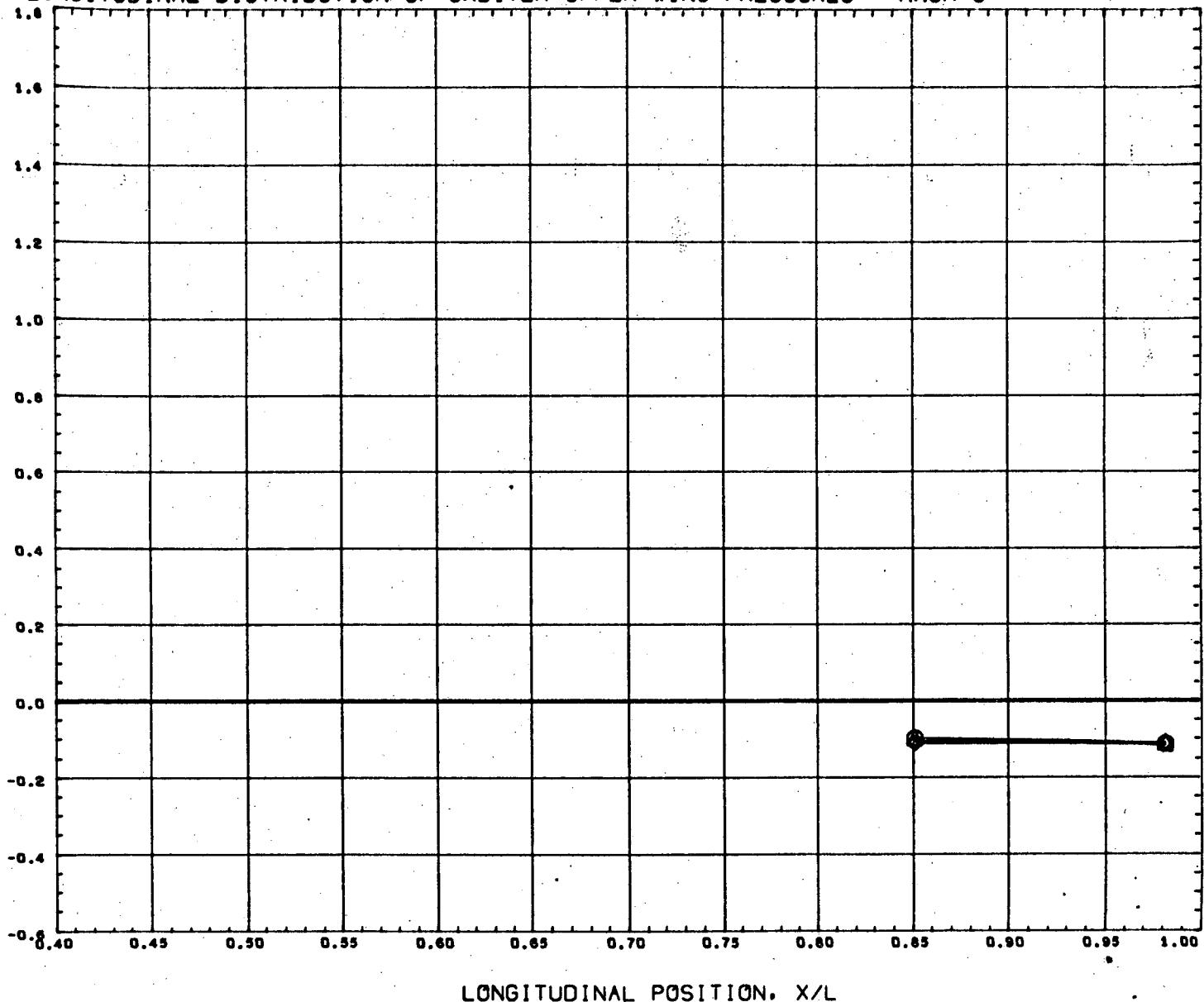
REFERENCE FILE
 AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8324•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|------------|-------|-------|-------|
| Δ | 0.143 | 0.269 | 0.120 |
| \square | 0.101 | | |
| \diamond | 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|-------|
| ALPHAB | 10.004 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

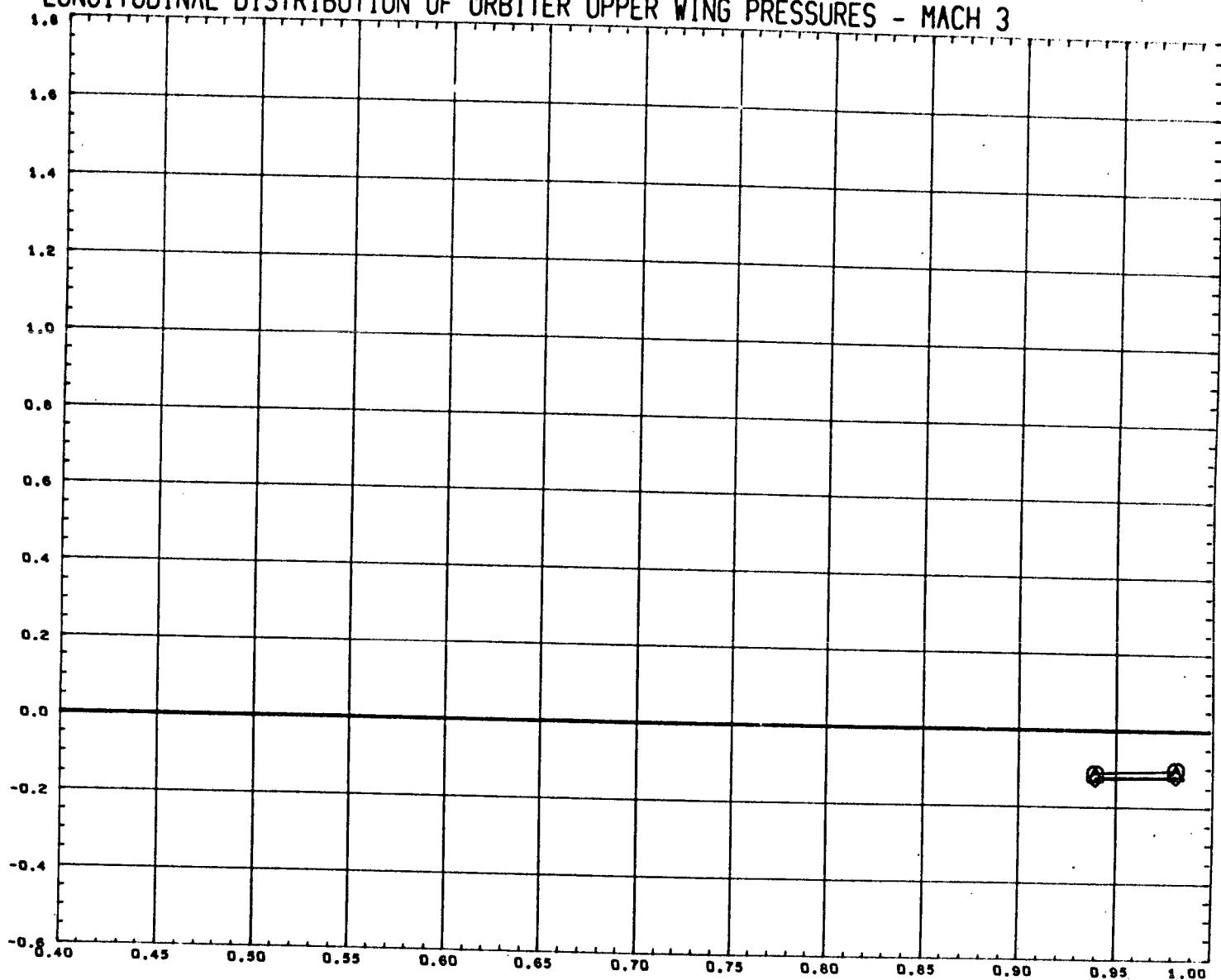
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8325•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| △ | - 0.143 | 0.399 | 0.120 |
| ○ | 0.101 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|--------------|
| ALPHAB | 10.004 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

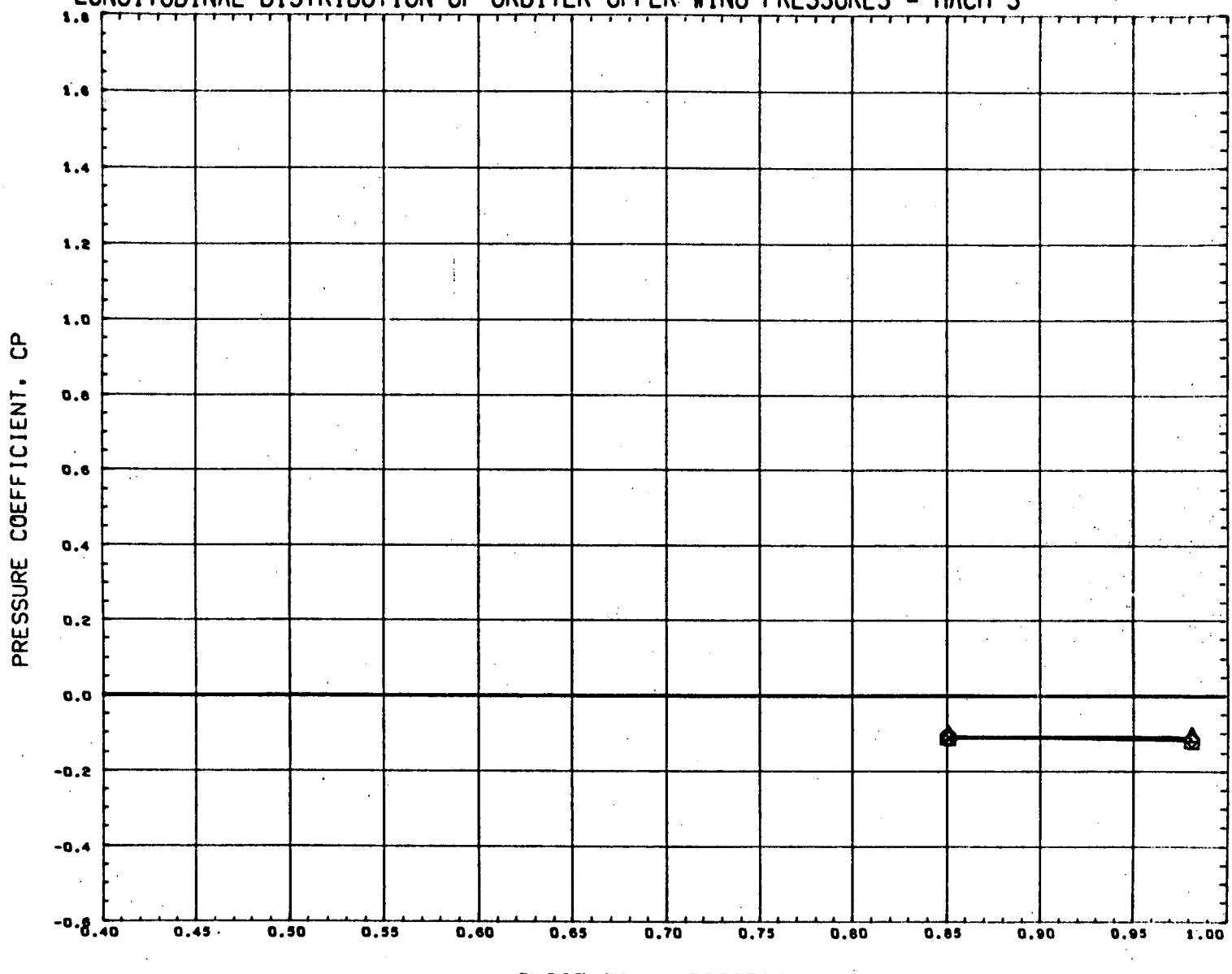
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8325•

PAGE 164

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|------------|---------|-------|-------|
| Δ | - 0.143 | 0.289 | 0.151 |
| \diamond | 0.103 | | |
| \diamond | 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|-------|
| ALPHAB | 10.004 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

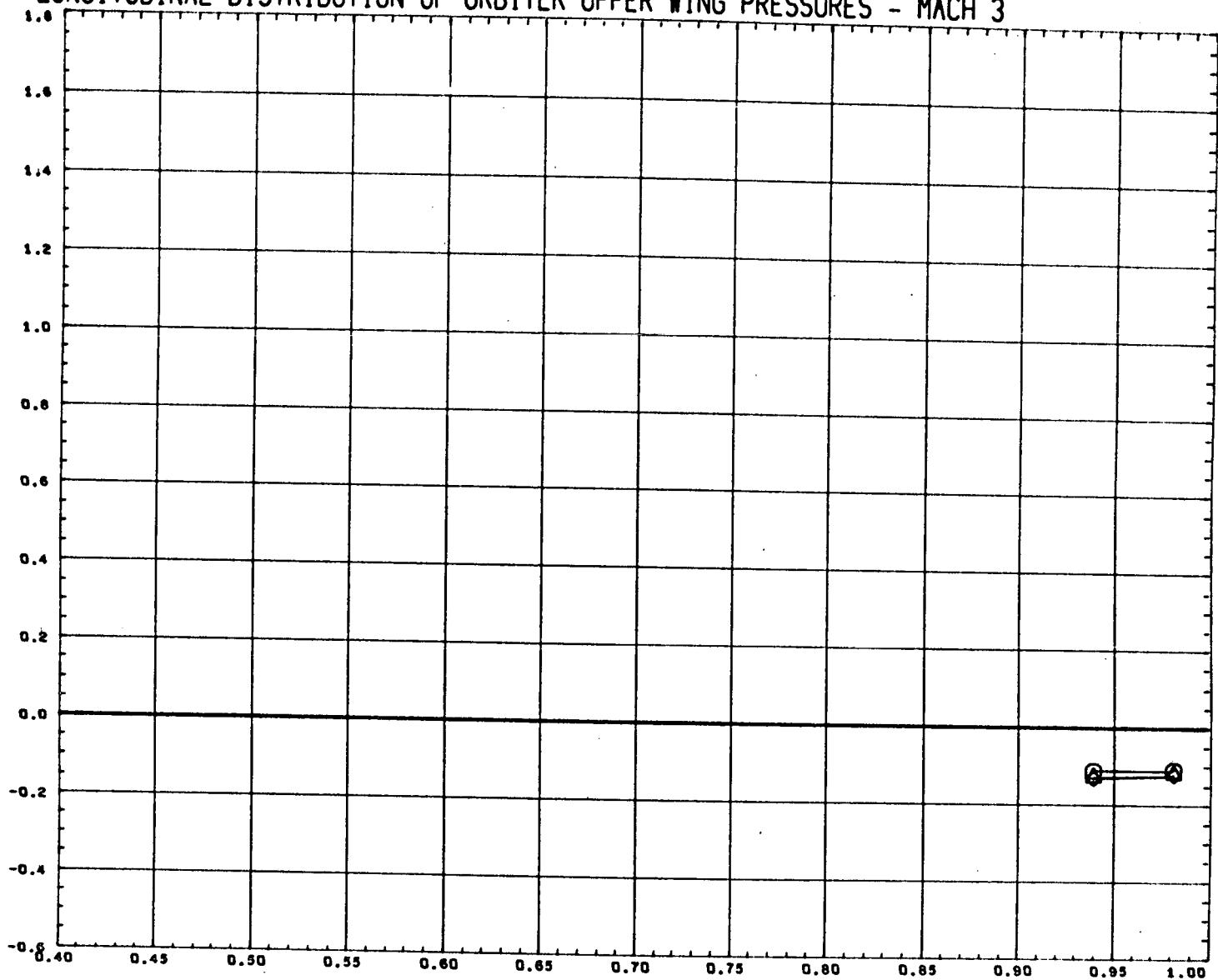
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8325•

PAGE 165

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | -0.143 | 0.399 | 0.151 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|-------|
| ALPHAB | 10.004 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

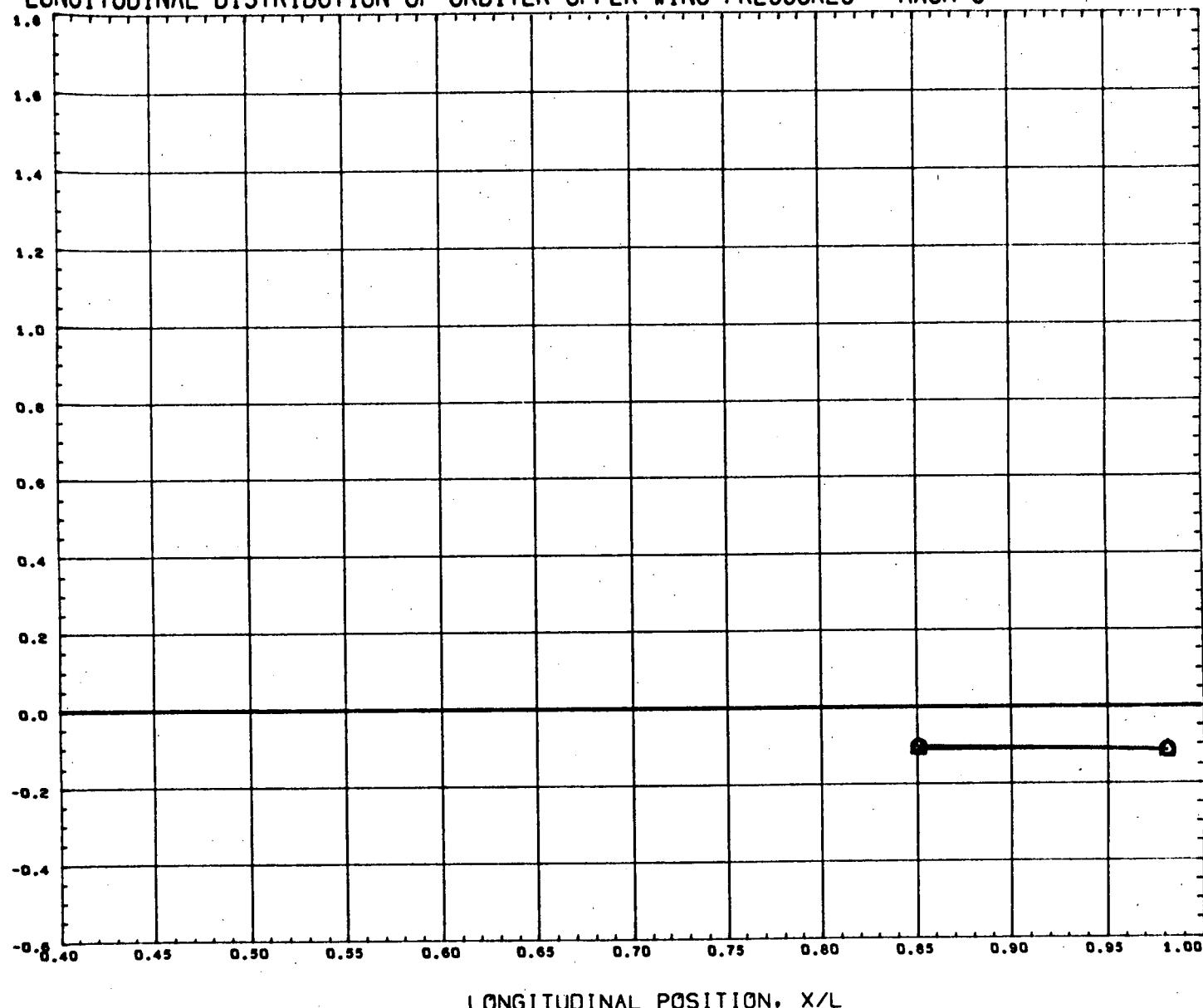
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8325•

PAGE 166

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

| | | | | |
|---|---|-------|-------|-------|
| △ | - | 0.144 | 0.289 | 0.228 |
| ○ | - | 0.103 | | |
| ◊ | - | 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|-------|
| ALPHAB | 10.004 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

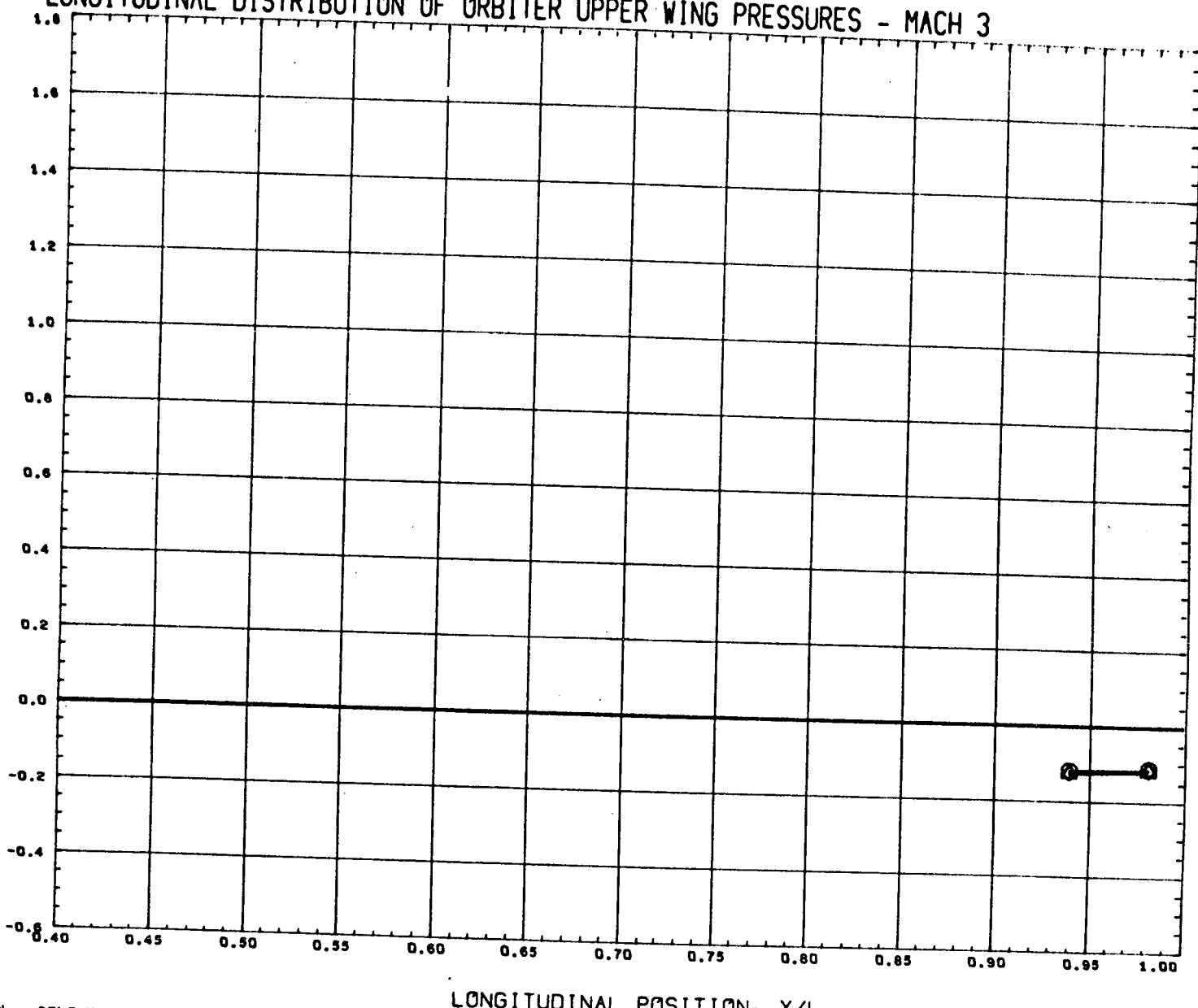
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8325•

PAGE 167

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.144 | 0.399 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

LONGITUDINAL POSITION. X/L

| PARAMETRIC VALUES | | |
|-------------------|--------|--------|
| ALPHAB | 10.004 | MACH |
| ALPHAI | 0.000 | ORBPOW |
| BSTPOW | 0.000 | |

REFERENCE FILE

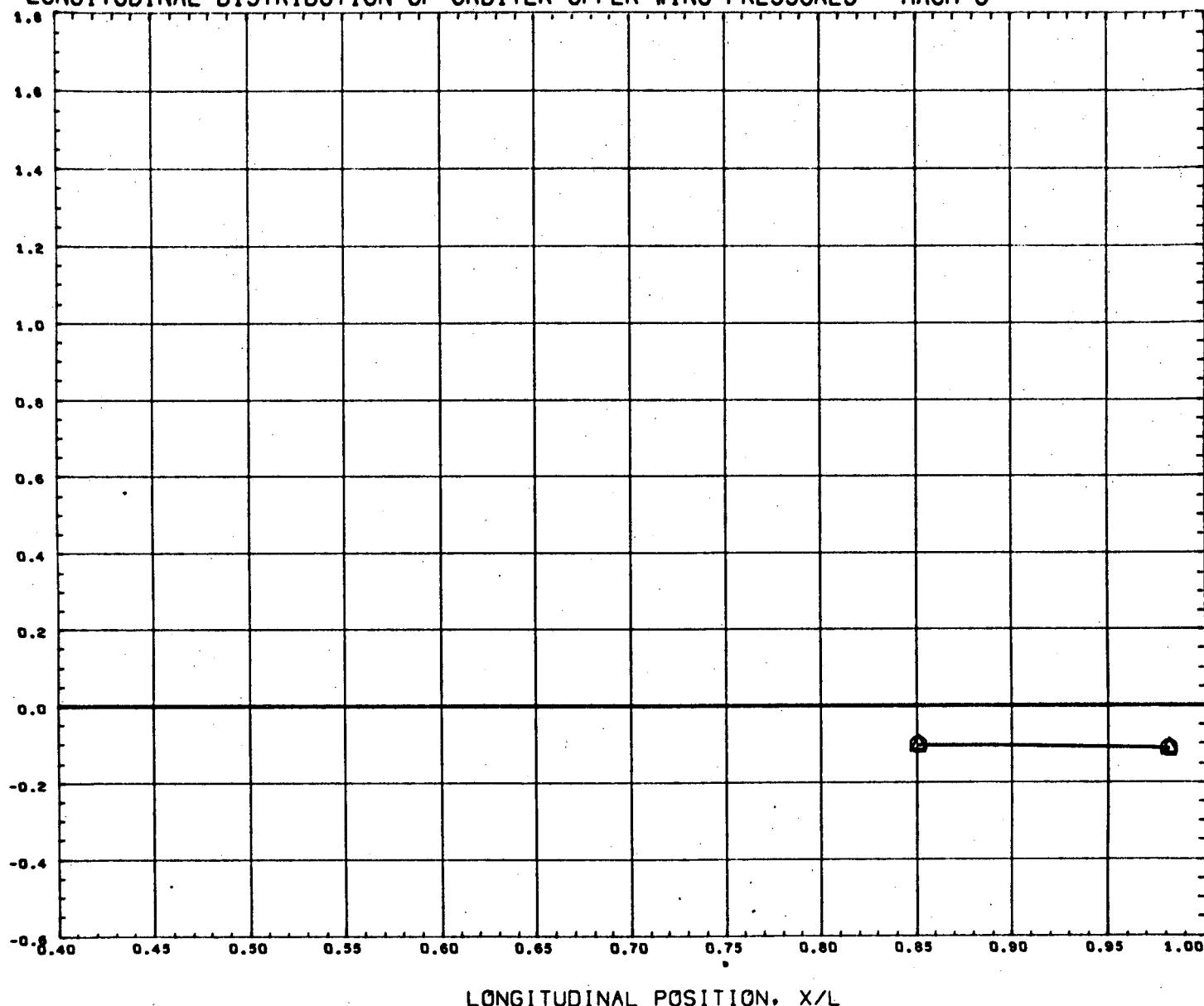
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8325•

PAGE 168

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| O | - 0.390 | 0.289 | 0.908 |
| Δ | 0.481 | | |

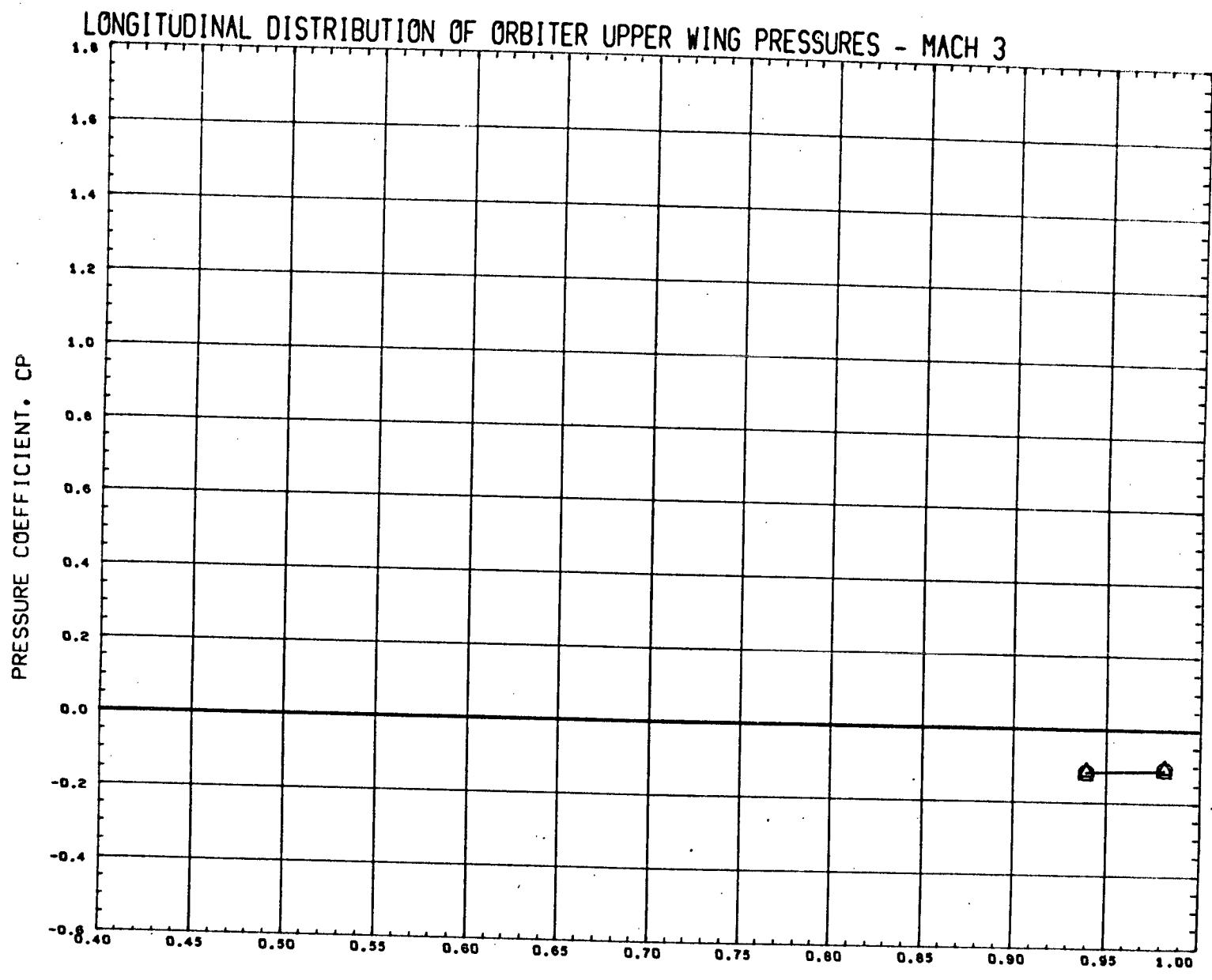
| PARAMETRIC VALUES | | |
|-------------------|--------|--------------|
| ALPHAB | 10.004 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8325•

PAGE 169



| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| O | - 0.390 | 0.399 | 0.908 |
| △ | 0.481 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|--------------|
| ALPHAB | 10.004 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

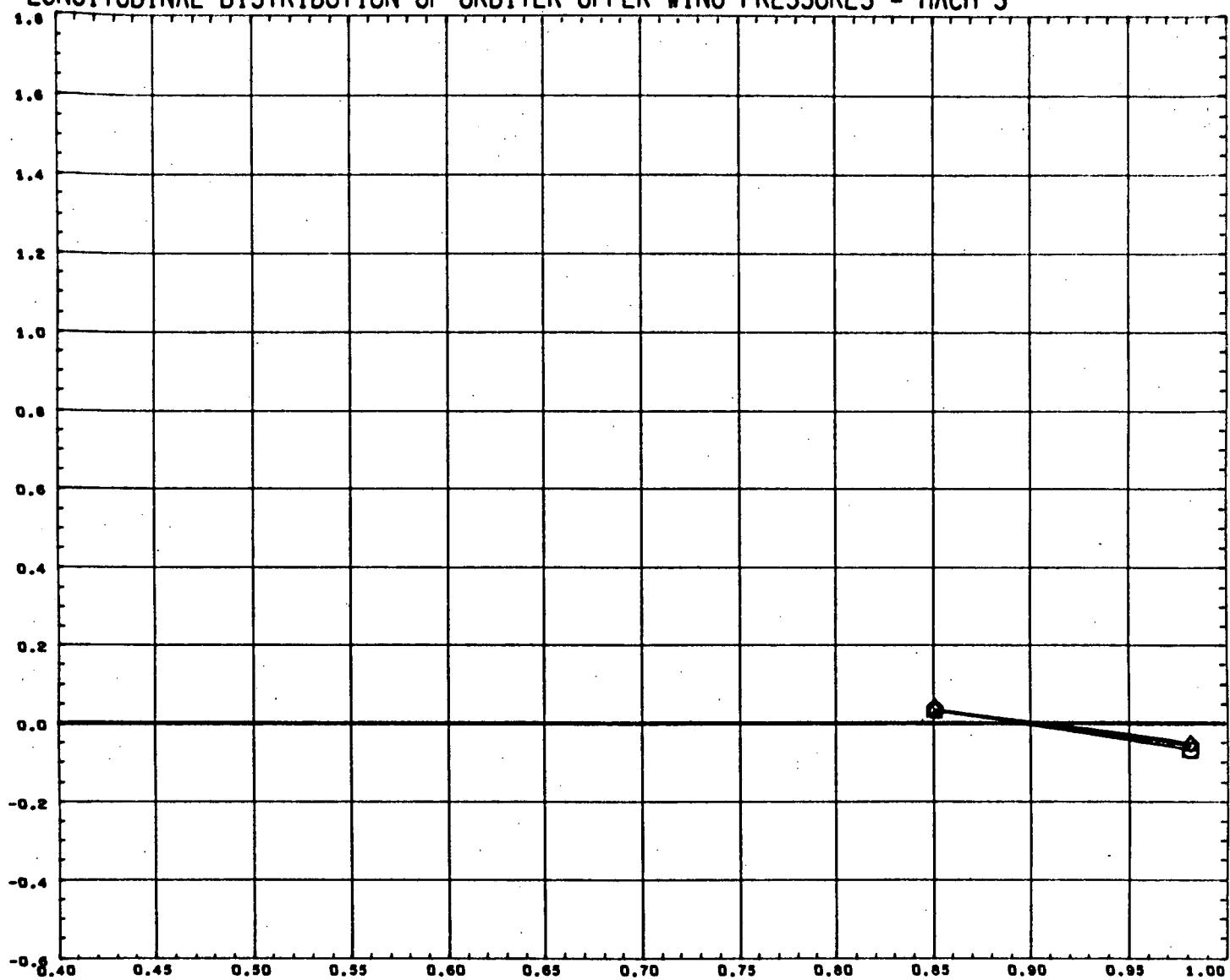
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8325•

PAGE 170

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| △ | 0.040 | 0.289 | 0.105 |
| ○ | 0.103 | | |
| ◊ | 0.166 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | = 9.980 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

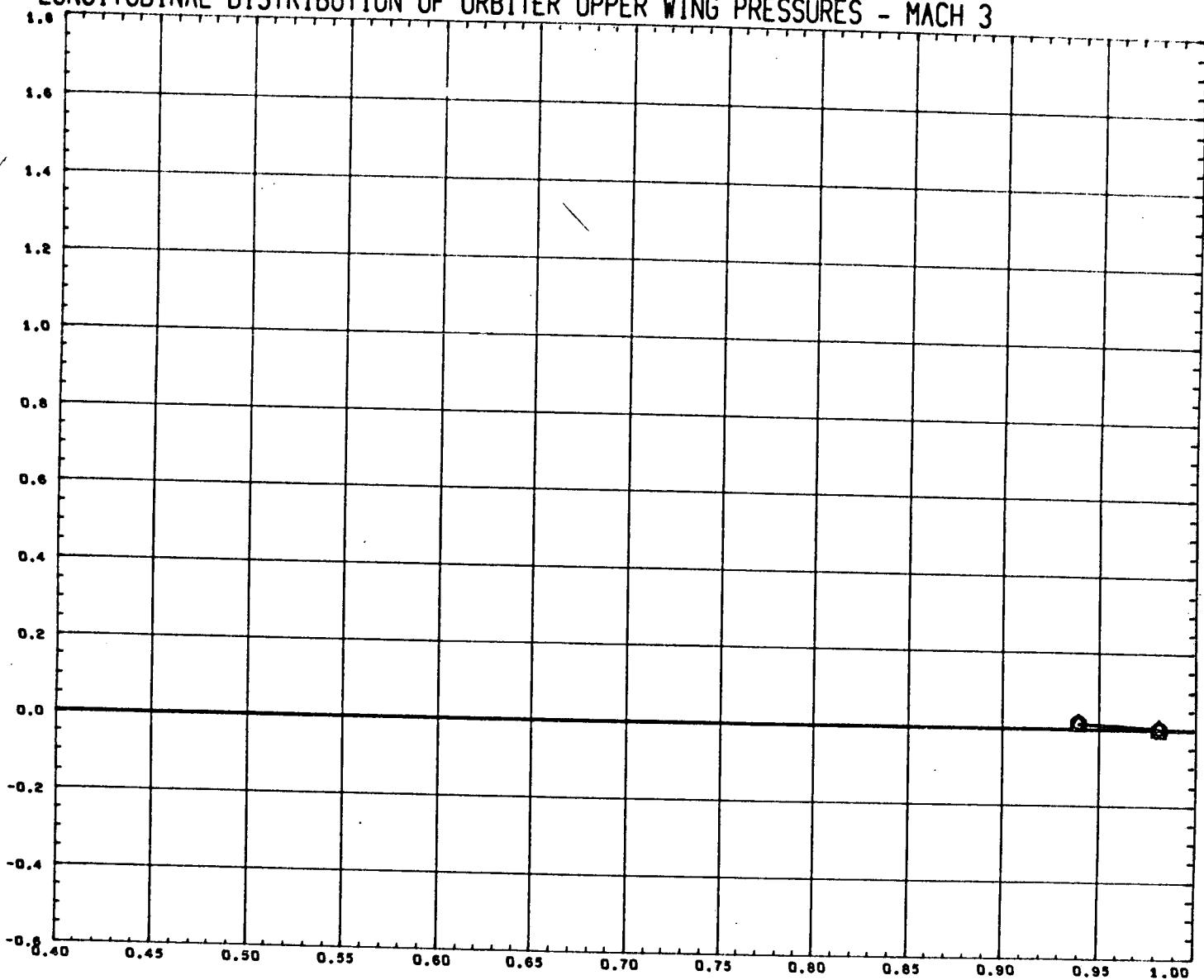
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8331•

PAGE 171

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ○ | 0.040 | 0.399 | 0.105 |
| △ | 0.103 | | |
| ◊ | 0.166 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 9.980 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

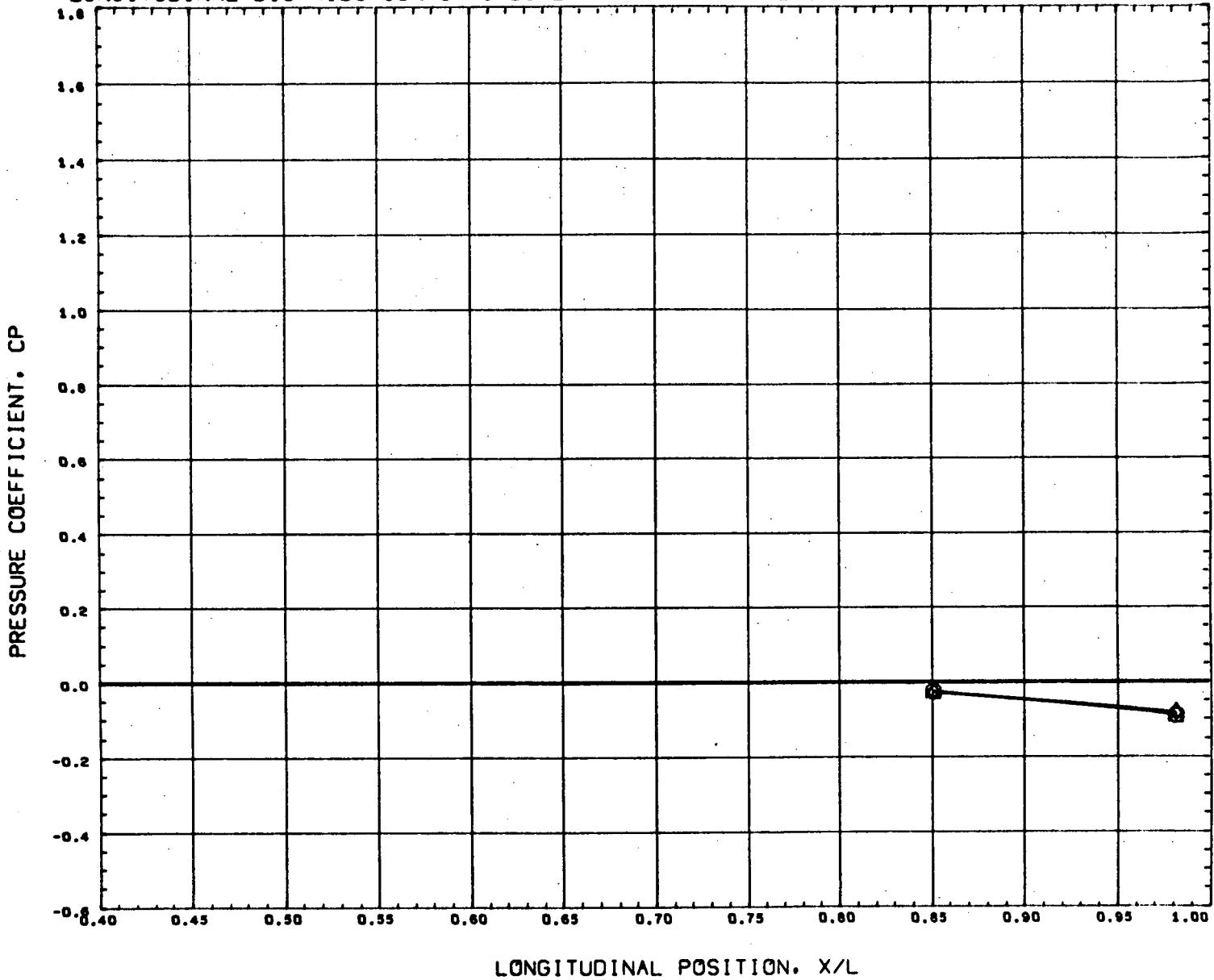
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8331•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O 0.038 0.269 0.105
 X 0.101
 D 0.161

PARAMETRIC VALUES
 ALPHAB = 4.950 MACH 3.000
 ALPHAI = 0.000 ORBPOW = 0.000
 BSTPOW = 0.000

REFERENCE FILE

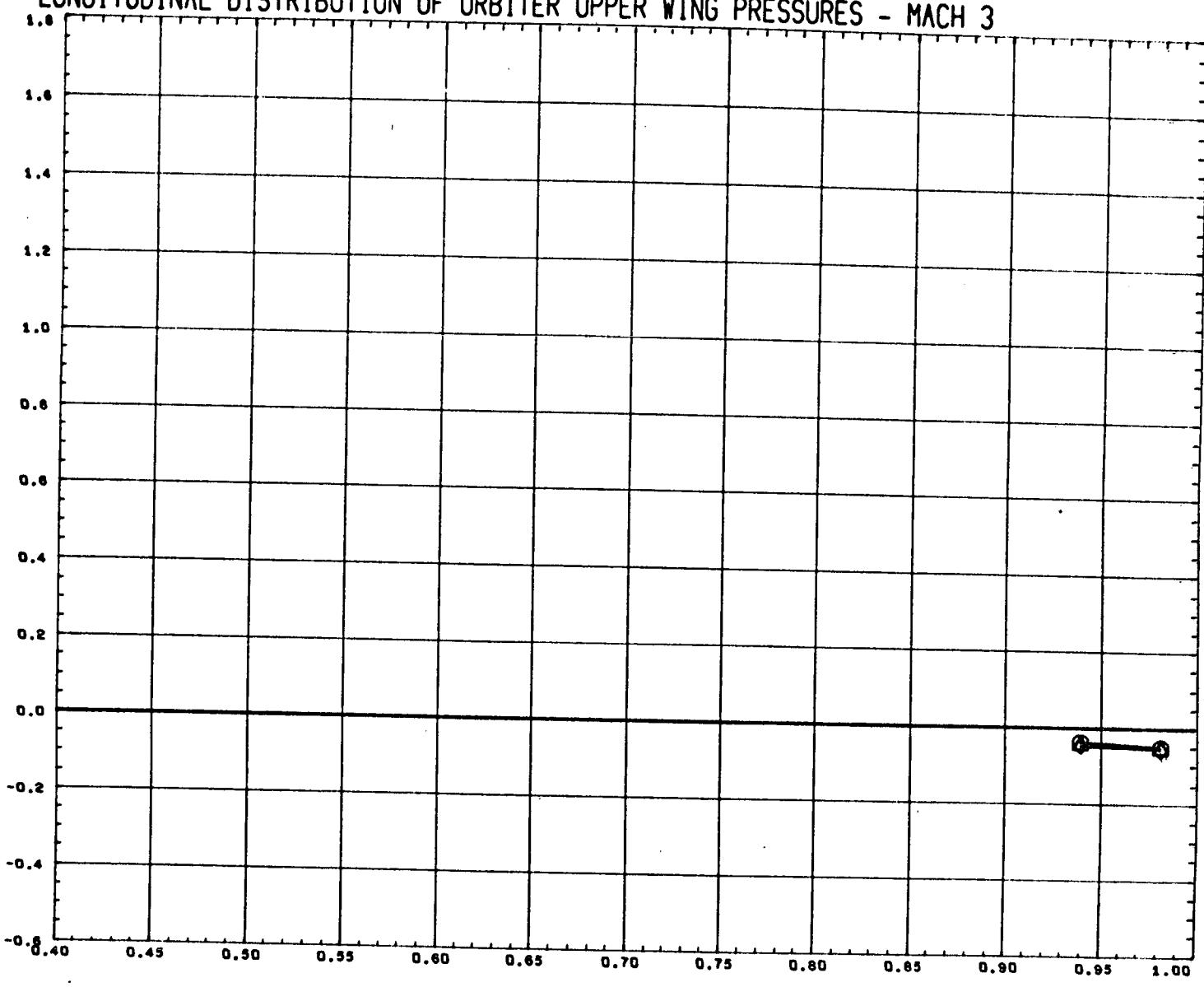
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8332•

PAGE 173

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| △ | 0.038 | 0.399 | 0.105 |
| ◊ | 0.101 | | |
| ◇ | 0.161 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 4.950 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

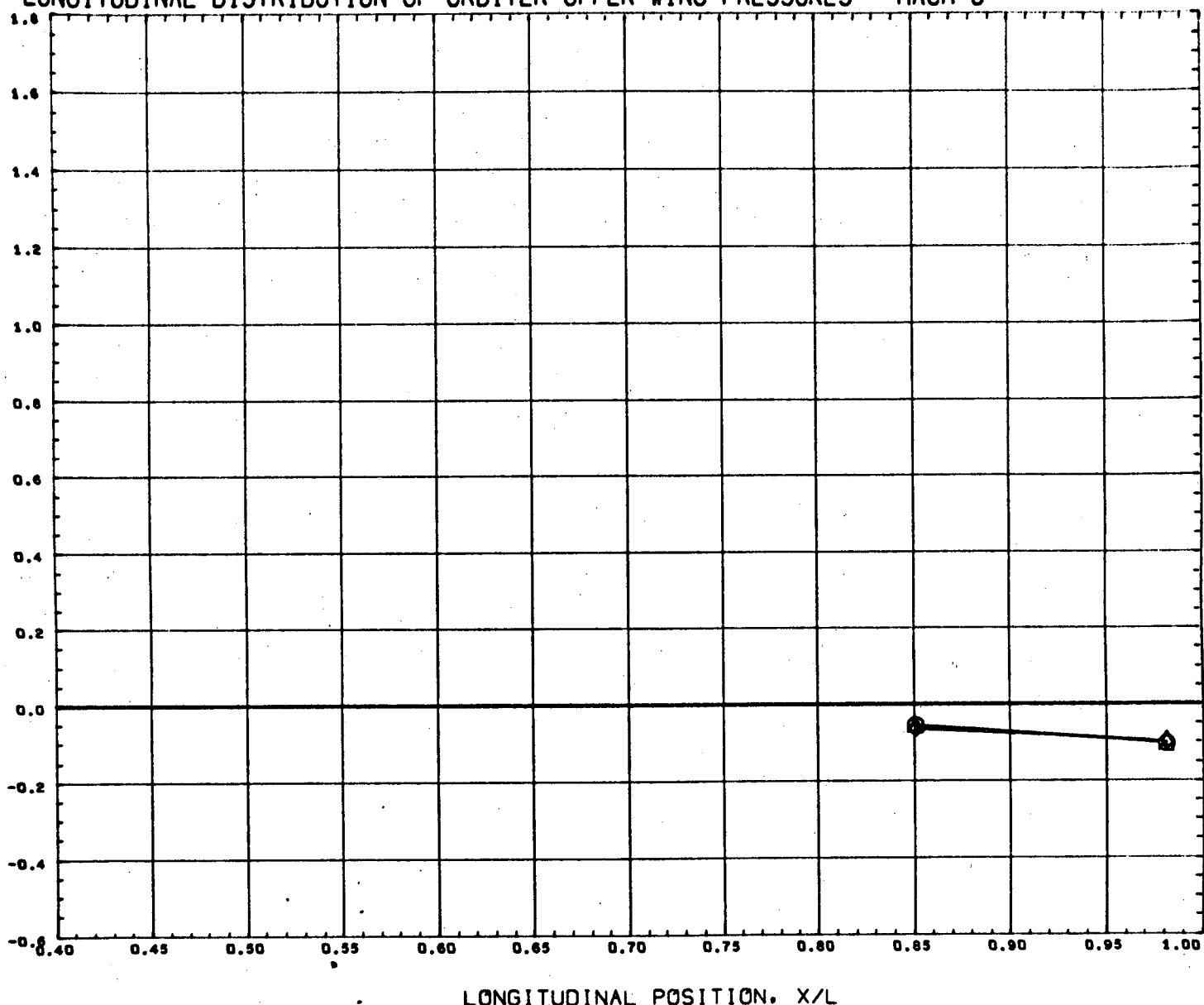
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8332•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| △ | 0.040 | 0.289 | 0.105 |
| ○ | 0.104 | | |
| ◊ | 0.167 | | |

| PARAMETRIC VALUES | | | |
|-------------------|-------|--------|-------|
| ALPHAB | 0.003 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

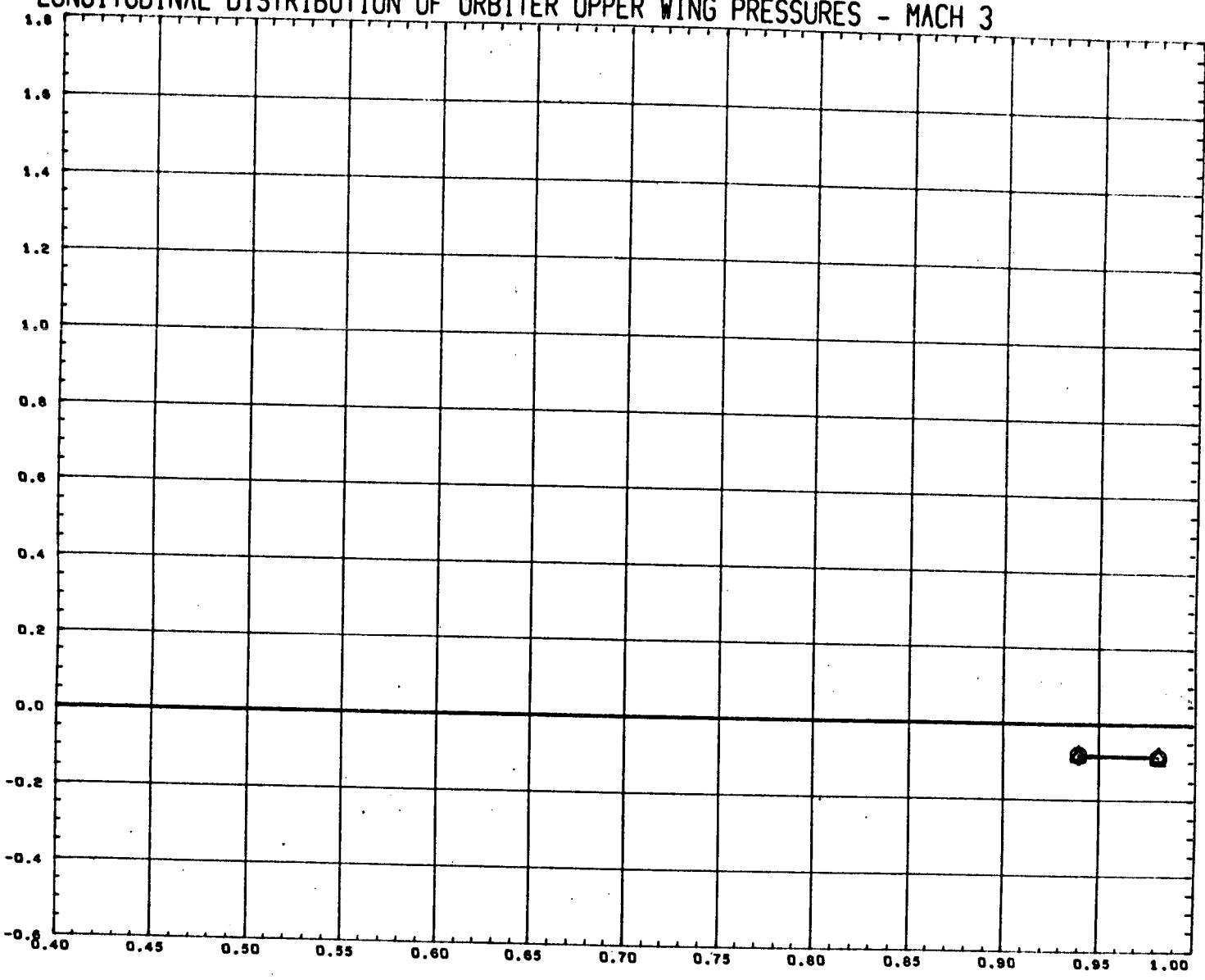
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8333•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

SYMBOL DELTAX Y/B DELTAZ
 □ 0.040 0.399 0.105
 △ 0.104 0.105
 ◇ 0.167 0.105

| PARAMETRIC VALUES | | |
|-------------------|-------|---------------|
| ALPHAB | 0.003 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

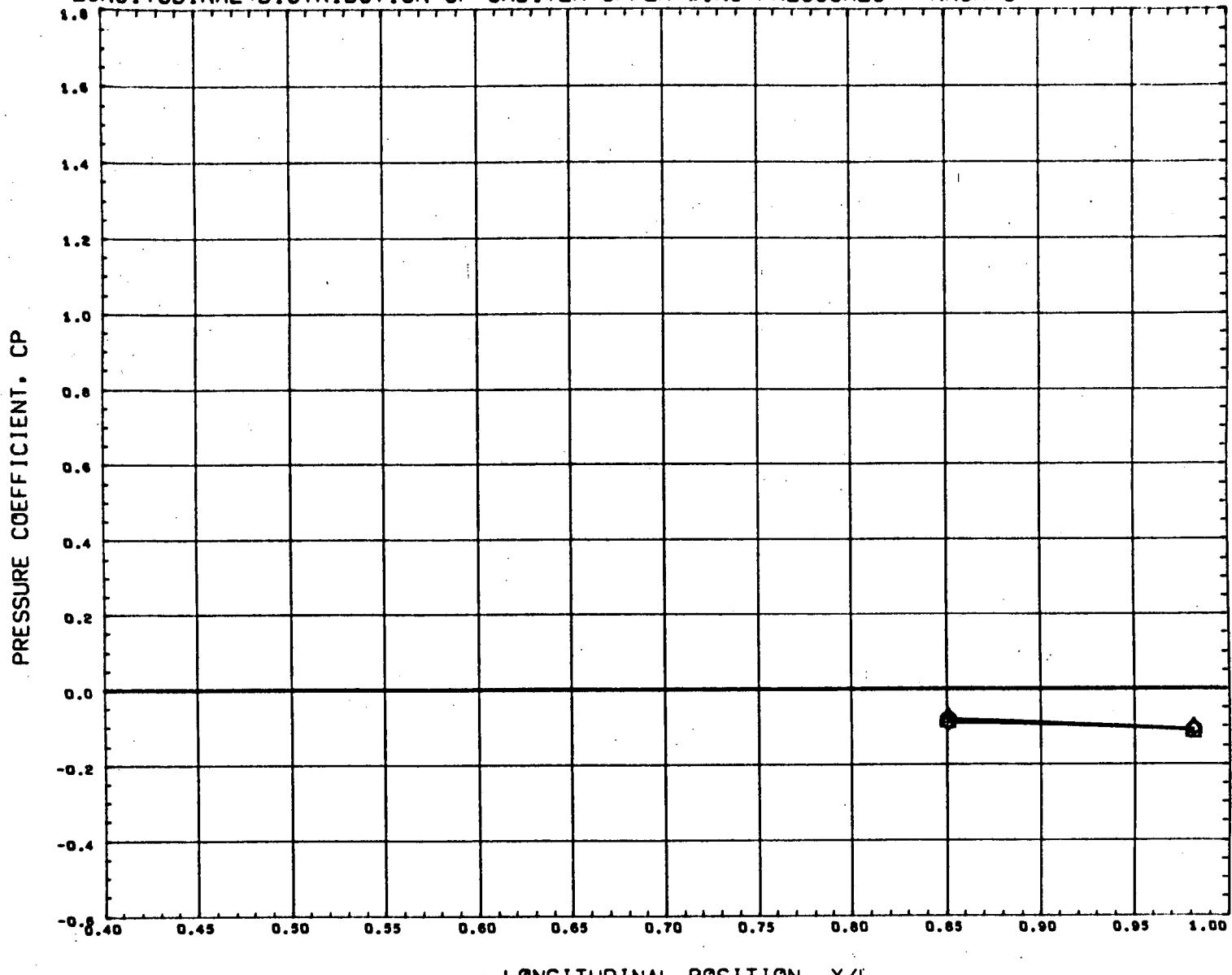
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8333•

PAGE 176

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3



| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ◇ | 0.038 | 0.269 | 0.105 |
| ◆ | 0.099 | | |
| ○ | 0.162 | | |

| PARAMETRIC VALUES | | | |
|-------------------|-------|--------|-------|
| ALPHAB | 5.040 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

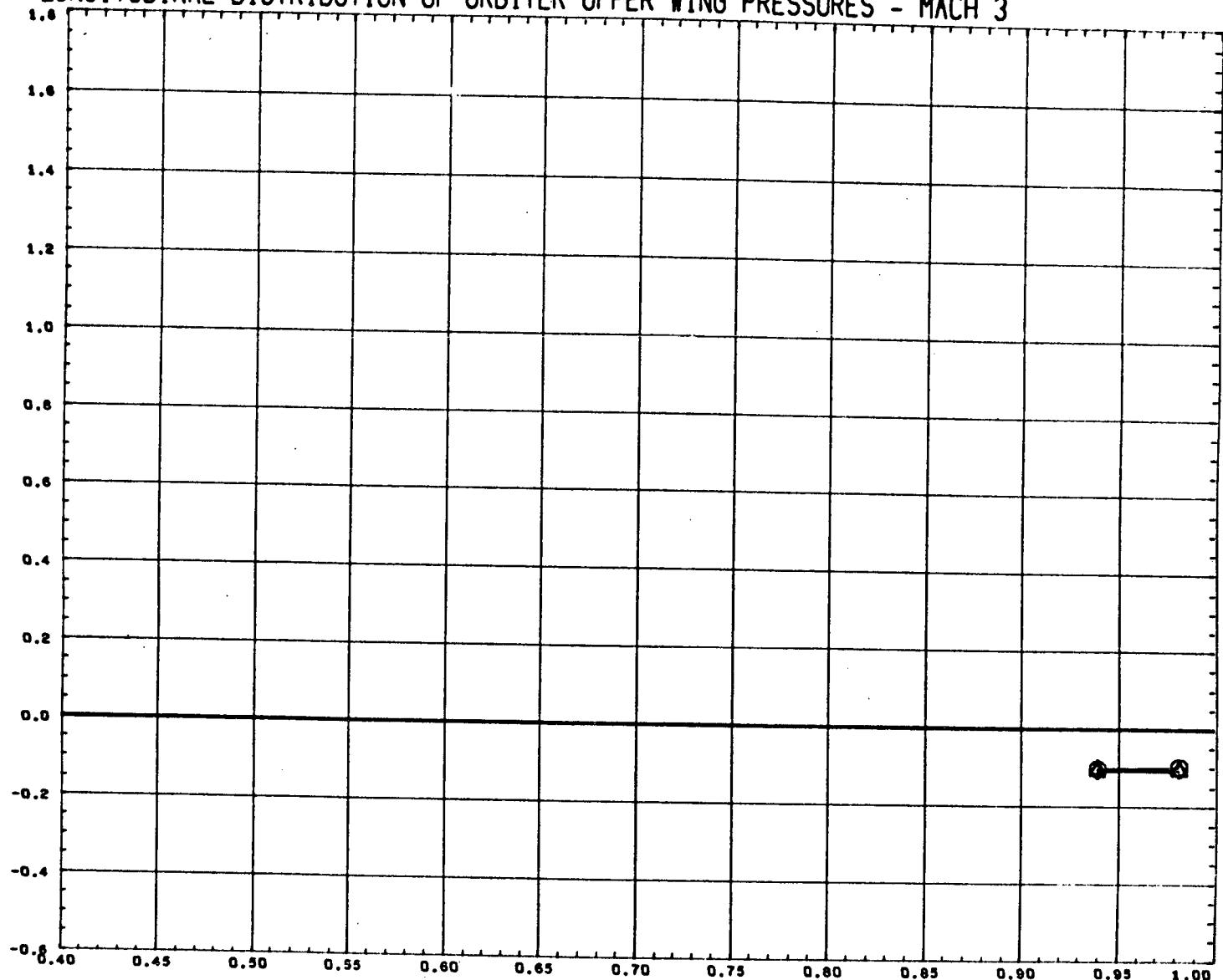
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8334•

PAGE 177

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ○ | 0.036 | 0.399 | 0.105 |
| △ | 0.099 | | |
| ◊ | 0.162 | | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------|
| ALPHAB | 5.040 | MACH |
| ALPHAI | 0.000 | ORBPOW |
| BSTPOW | 0.000 | |

REFERENCE FILE

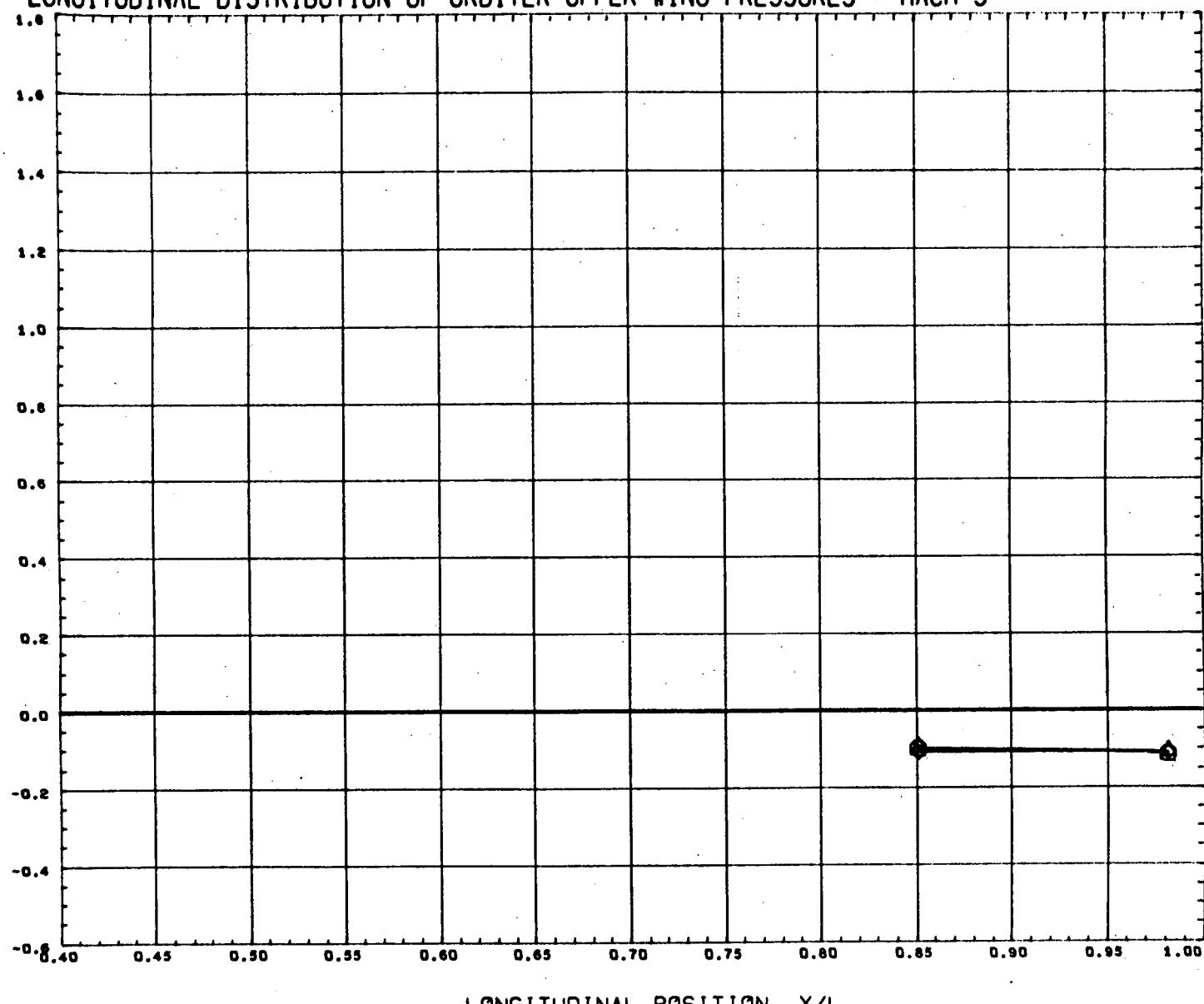
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8334•

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LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| O | 0.042 | 0.289 | 0.105 |
| △ | 0.104 | | |
| ◊ | 0.169 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|--------|
| ALPHAB | 10.000 | MACH |
| ALPHAI | 0.000 | ORBPOW |
| BSTPOW | 0.000 | |

REFERENCE FILE

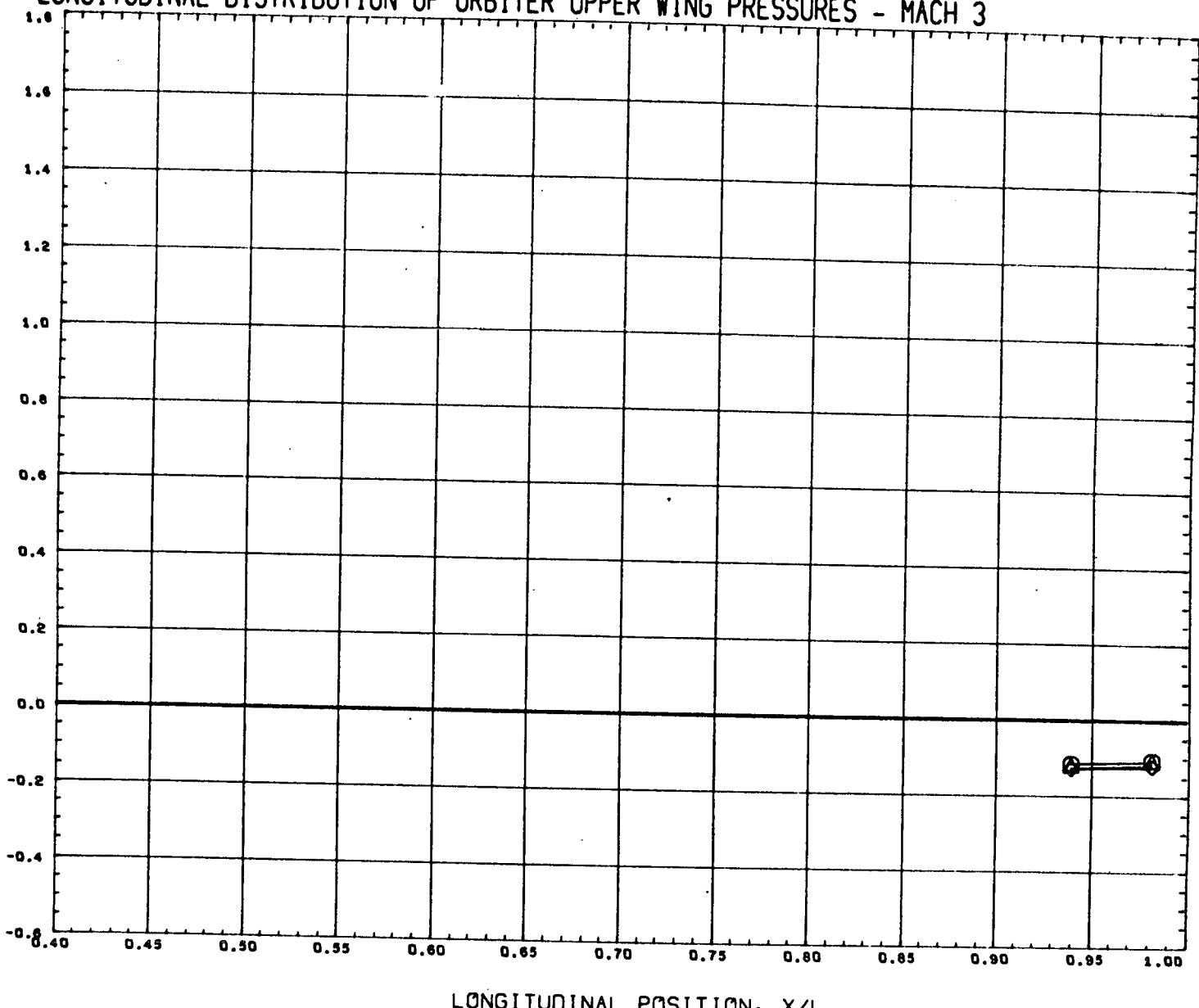
AEDC VA1163 MDAC ORBITER (UPPER WING)

•GT8335•

PAGE 179

LONGITUDINAL DISTRIBUTION OF ORBITER UPPER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|-------------|---------|-------|---------|
| \triangle | 0.042 | 0.399 | 0.105 |
| \diamond | 0.104 | | |
| \diamond | 0.165 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|--------|
| ALPHAB | 10.000 | MACH |
| ALPHAI | 0.000 | ORBPOW |
| BSTPOW | 0.000 | |

REFERENCE FILE

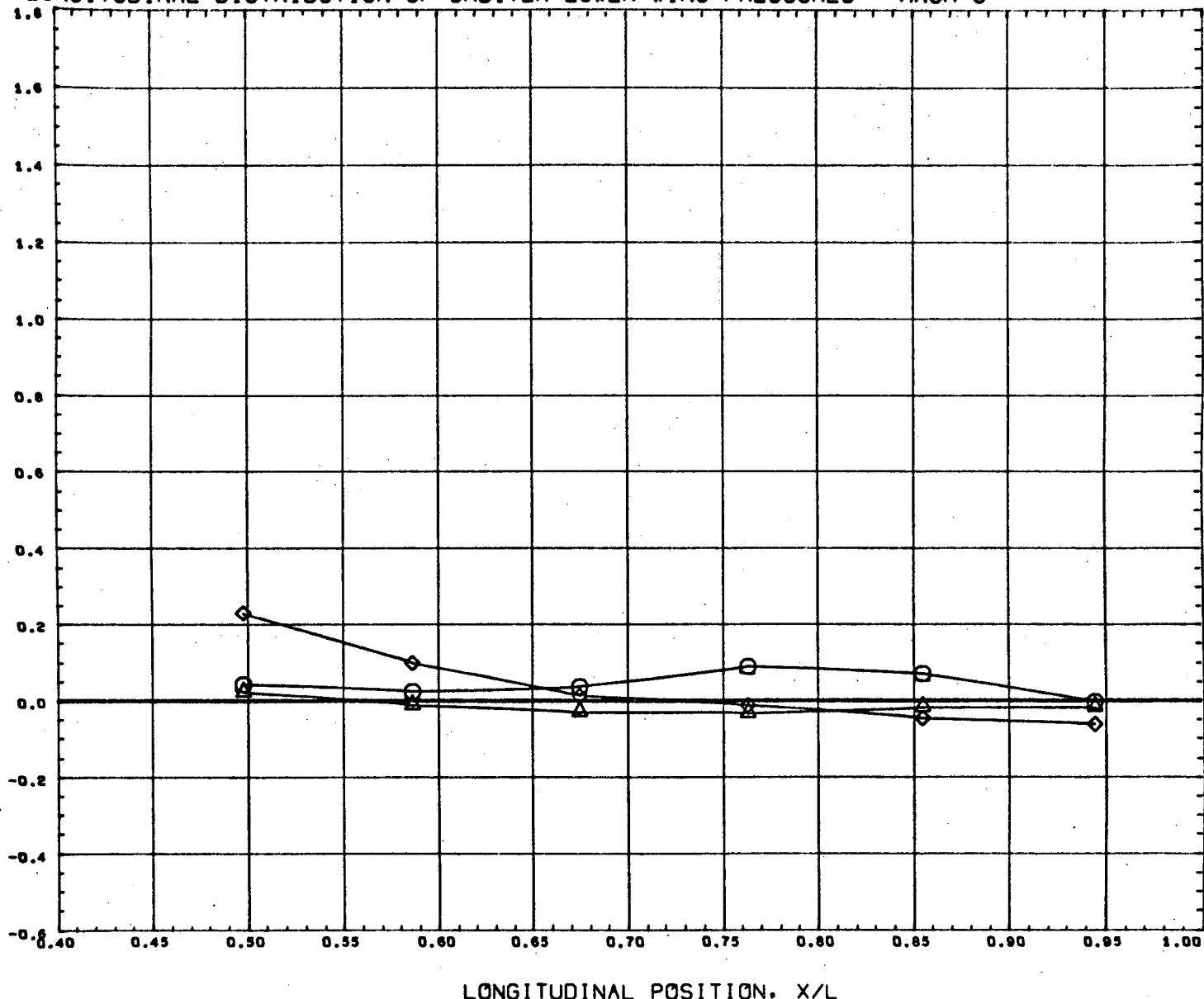
AEDC VA1163 MOAC ORBITER (UPPER WING)

•GT8335•

PAGE 180

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 0.230 | 0.120 |
| △ | 0.103 | - | - |
| ◊ | 0.226 | - | - |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 9.979 | MACH | 3.000 |
| ALPHAT | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

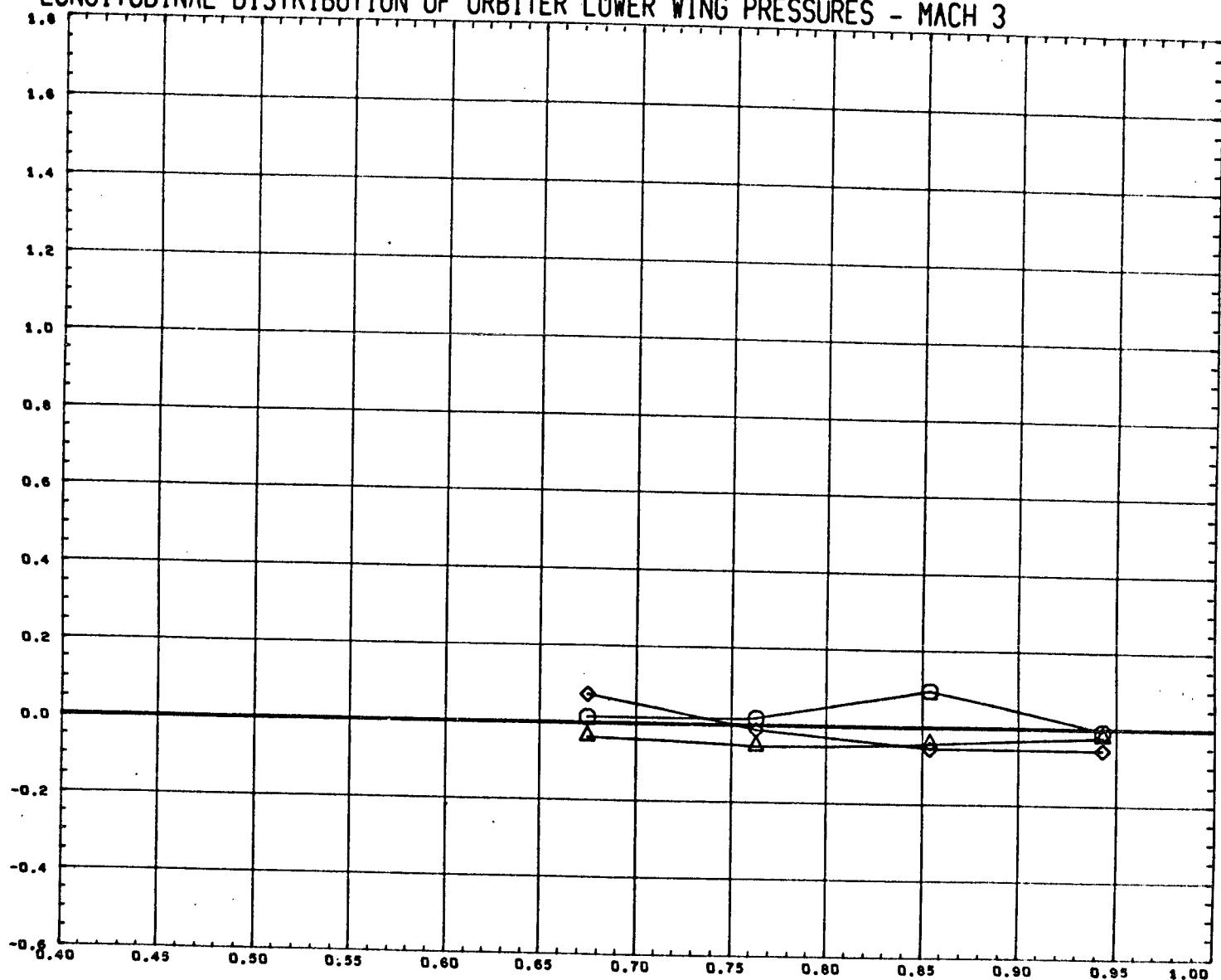
AEDC VA1163 MOAC ORBITER (LOWER WING)

•HT8311•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
 ○ - 0.143 0.399 0.120
 △ 0.103
 ◇ 0.226

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 9.979 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

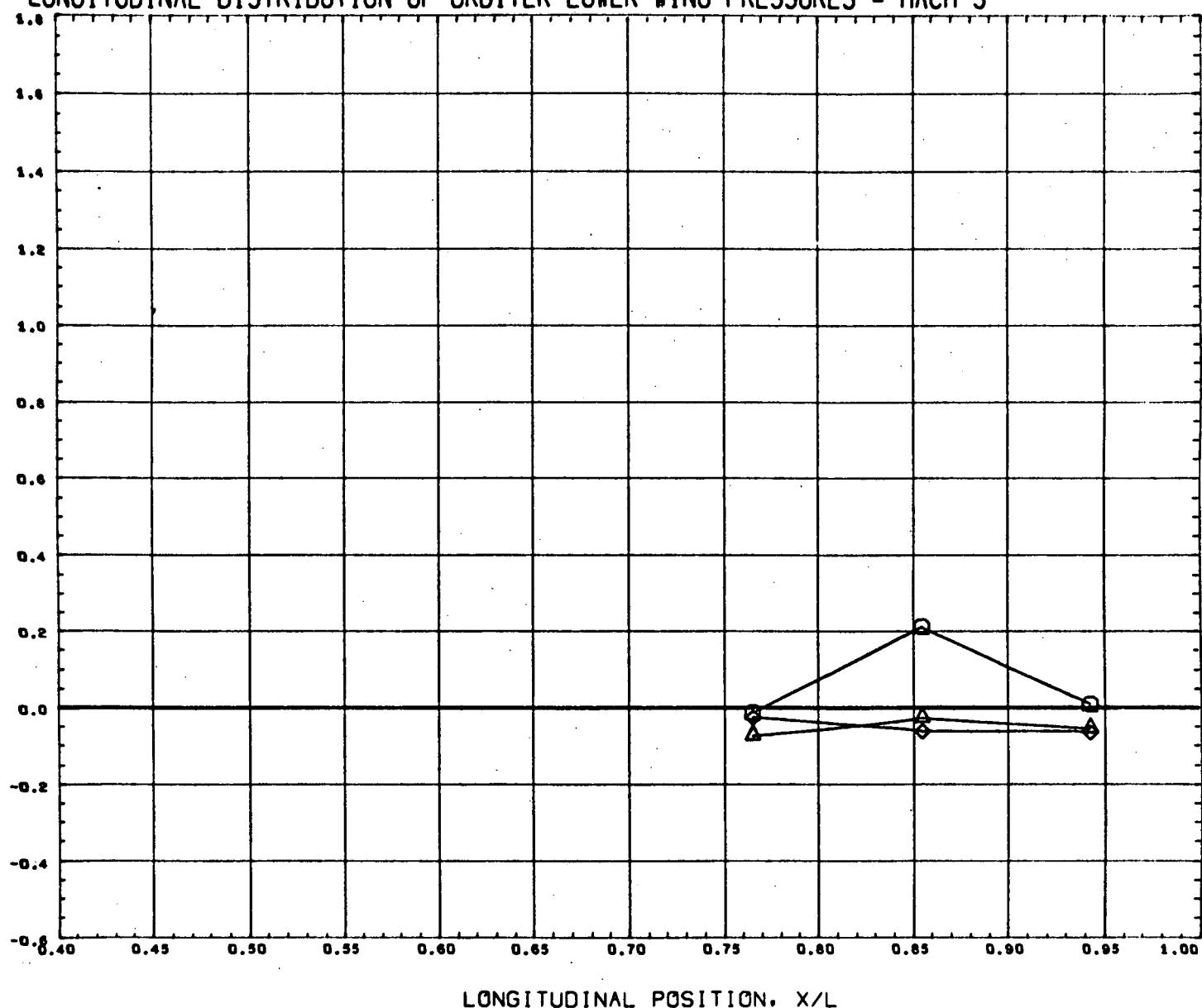
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8311•

PAGE 182

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.143 | 0.568 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 9.979 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

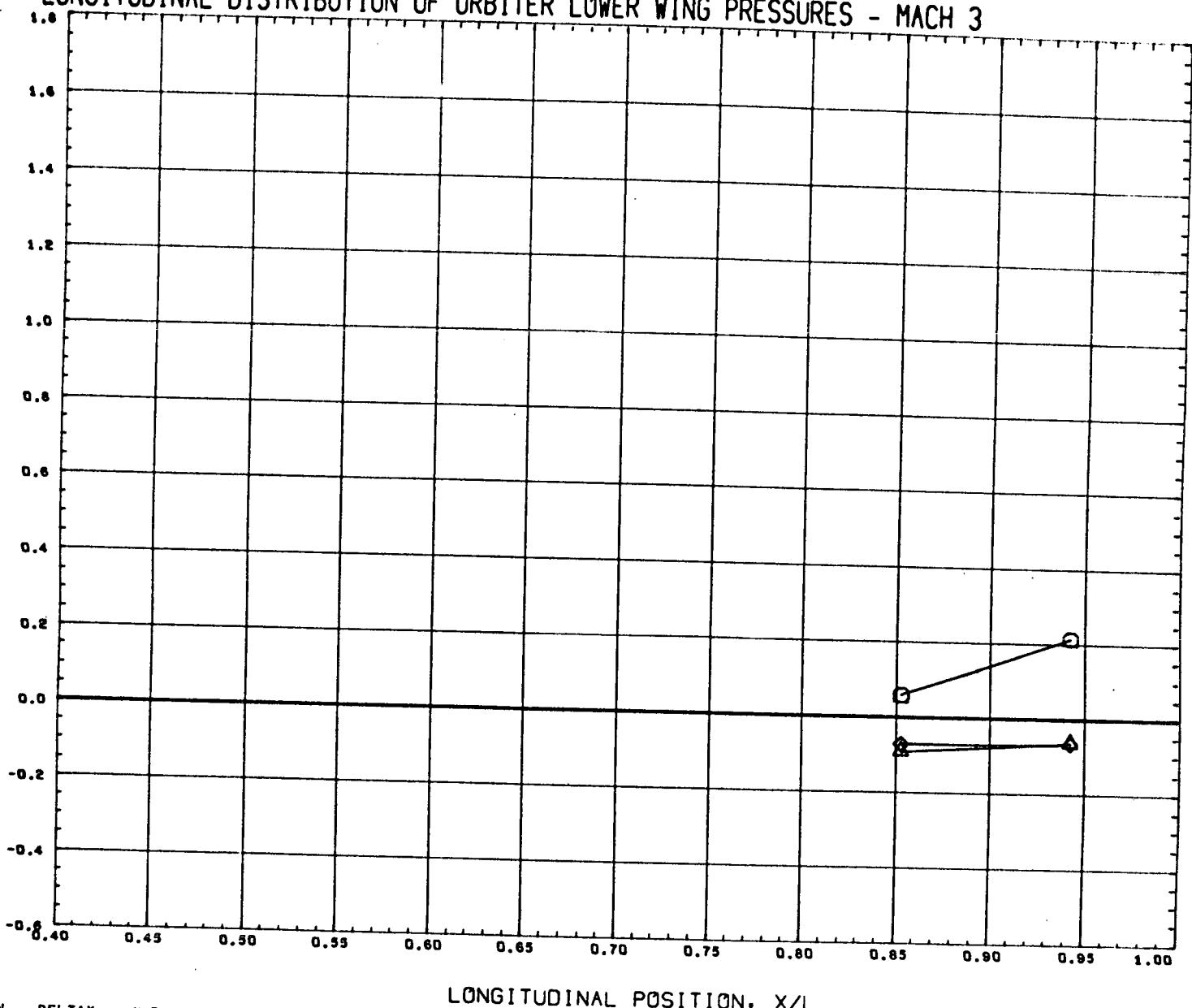
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8311•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

SYMBOL DELTAX Y/B DELTAZ

- - 0.143 0.738 0.120
- △ 0.103 0.120
- ◊ 0.228 0.228

PARAMETRIC VALUES

| | ALPHAB | MACH | ORBPOW |
|--------|---------|-------|---------|
| ALPHAI | - 9.979 | 3.000 | 100.000 |
| BSTPOW | 0.000 | | 50.000 |

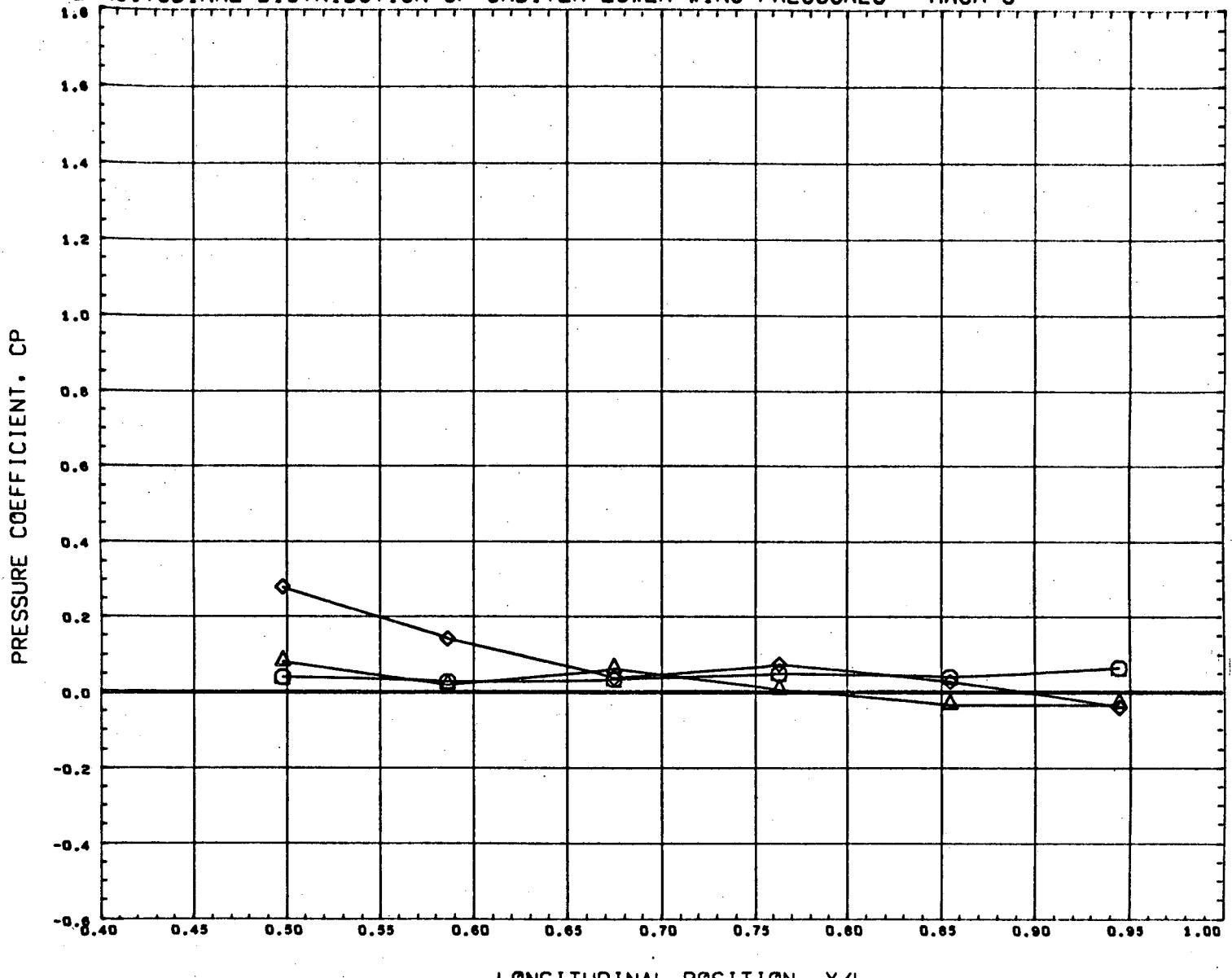
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8311•

PAGE 184

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

 - 0.143 0.230 0.151

 - 0.104 0.226

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|---------|
| ALPHAB | = 9.979 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

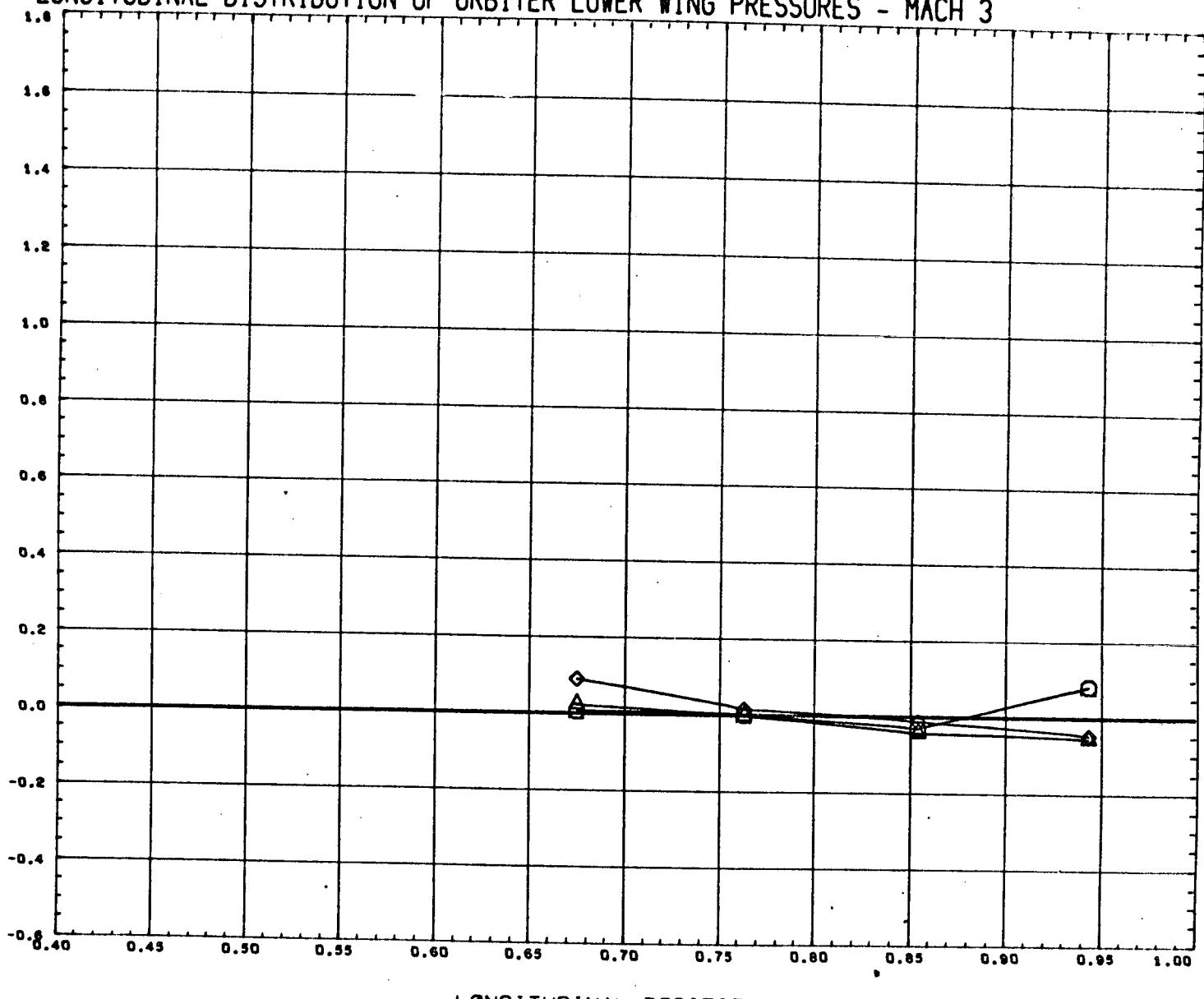
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8311•

PAGE 185

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ○ | -0.143 | 0.399 | 0.151 |
| △ | 0.104 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | = 9.979 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

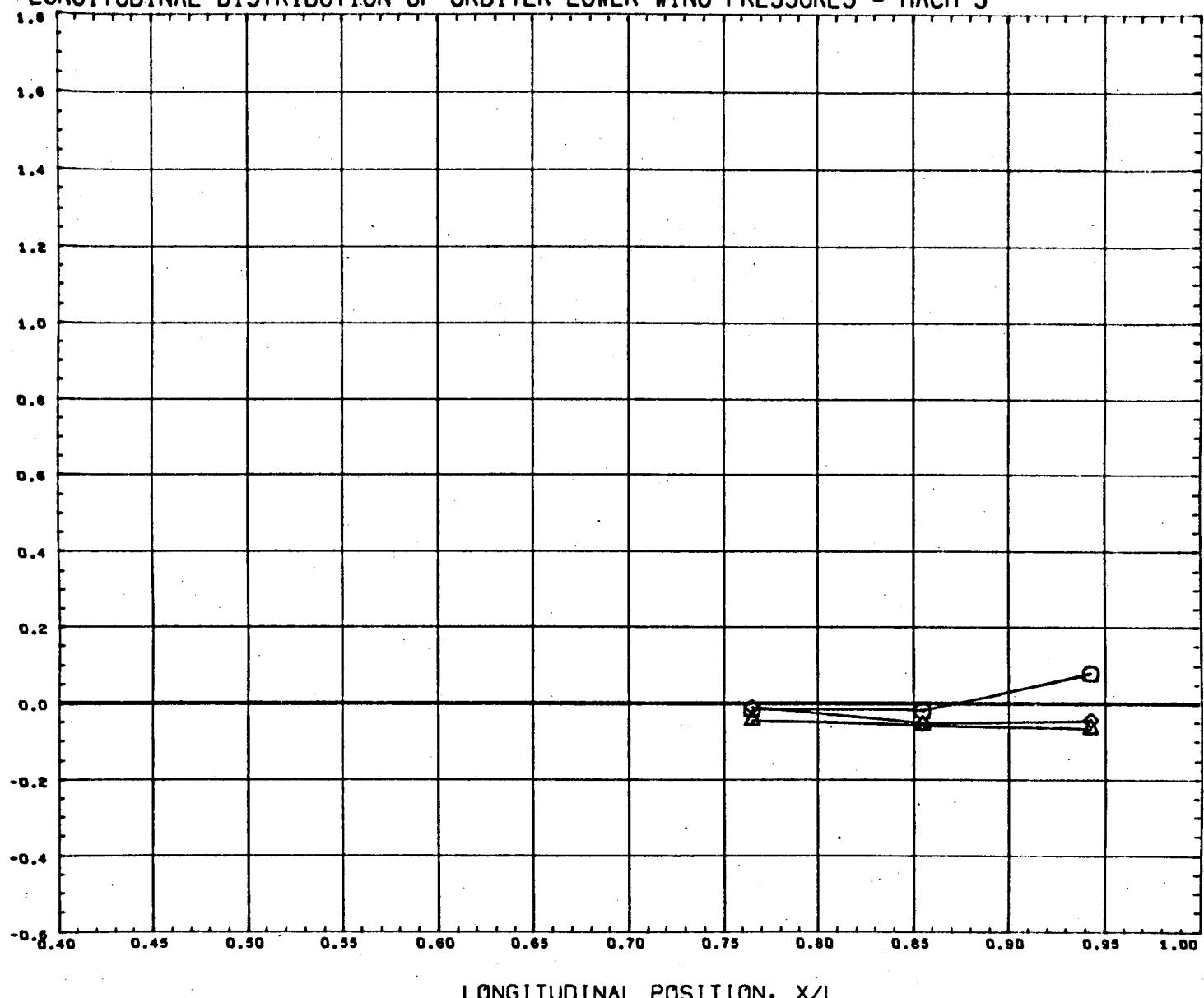
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8311•

PAGE 186

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.143 | 0.568 | 0.151 |
| △ | 0.104 | | |
| ◊ | 0.226 | | |

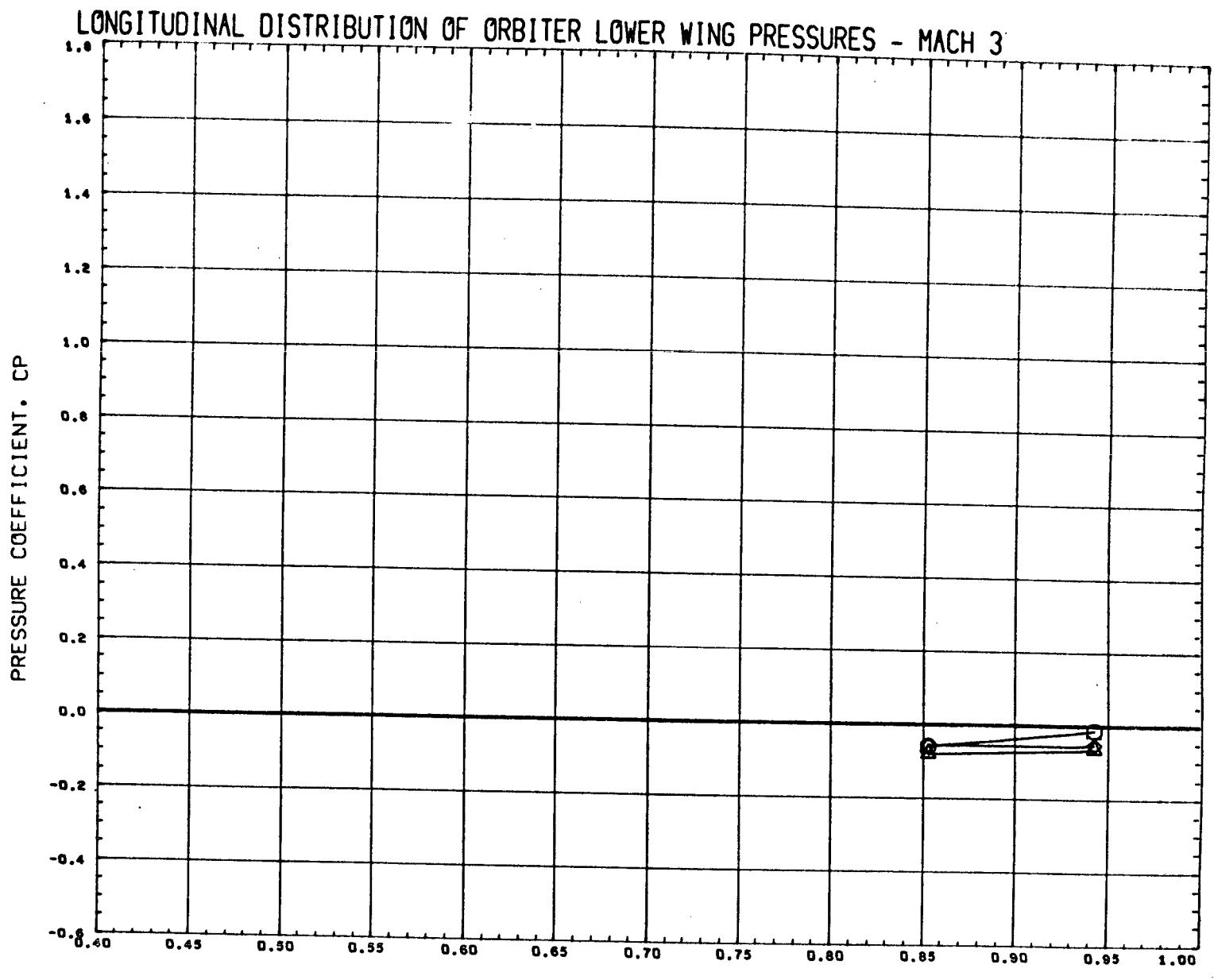
| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 9.979 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8311•

PAGE 187



| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.143 | 0.738 | 0.151 |
| △ | 0.104 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|----------------|
| ALPHAB | - 9.979 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

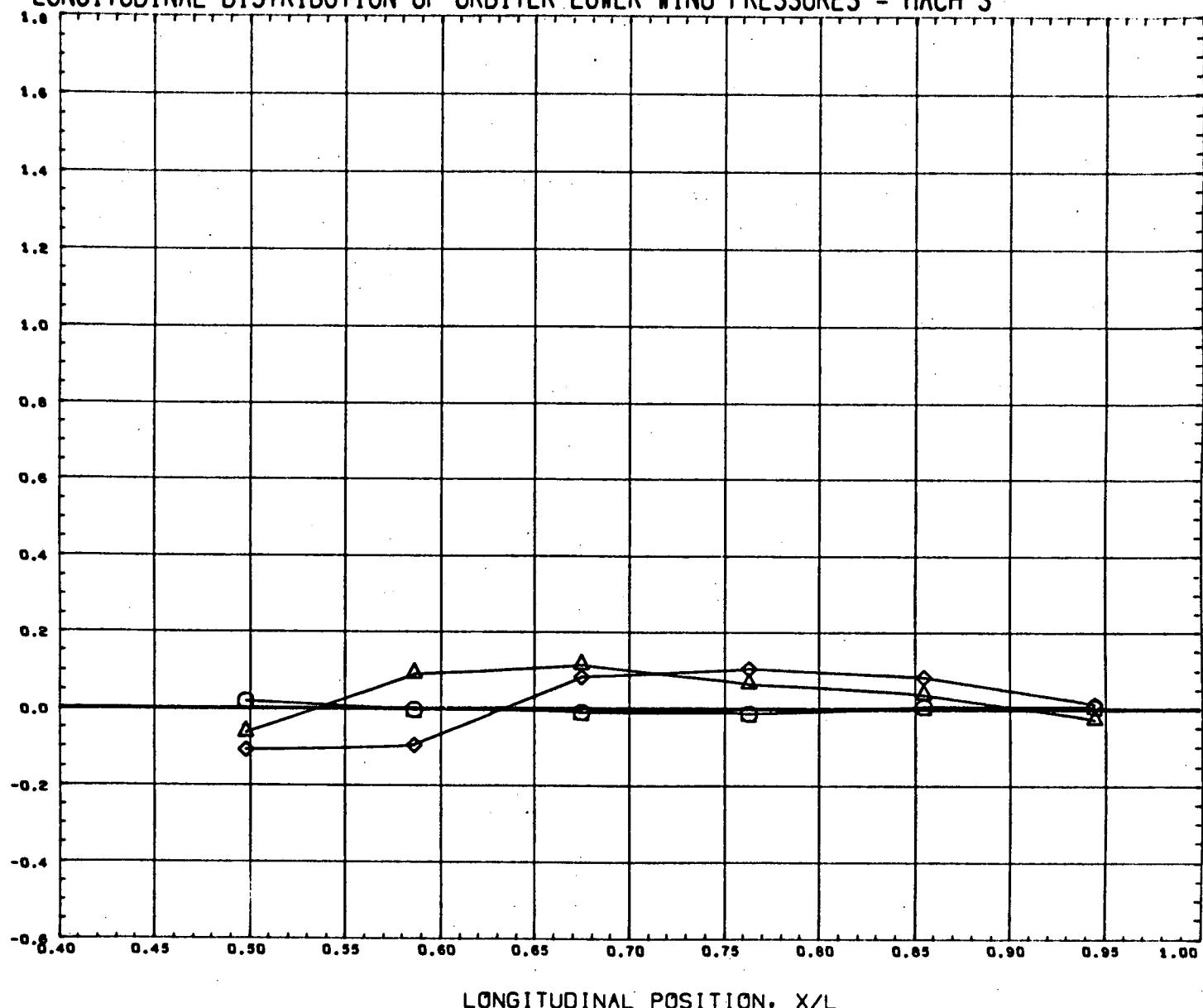
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8311•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.143 | 0.230 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | |
|-------------------|---------|
| ALPHAB | - 9.979 |
| ALPHAI | 0.000 |
| BSTPOW | 50.000 |
| MACH | 3.000 |
| ORBPOW | 100.000 |

REFERENCE FILE

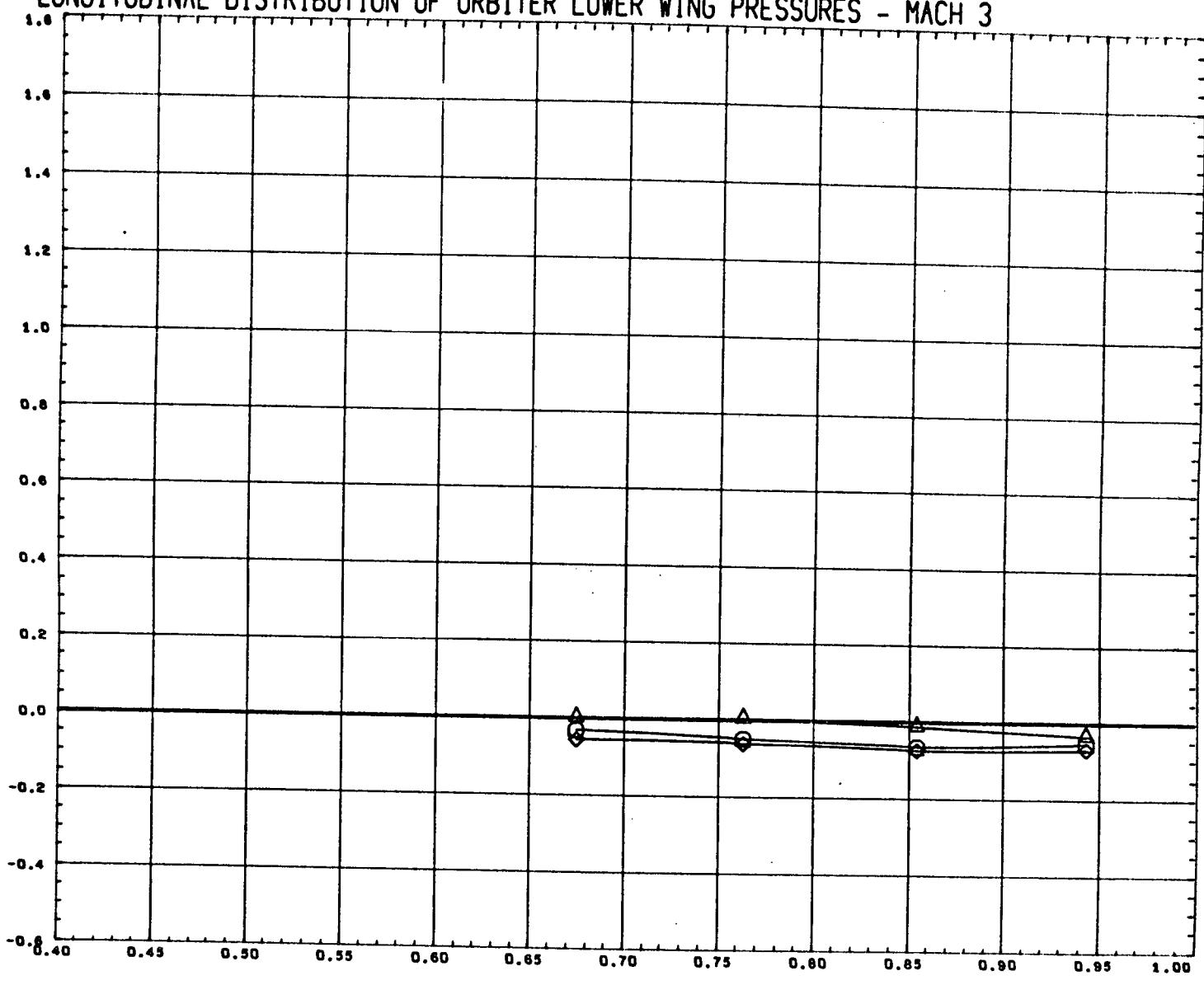
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8311•

PAGE 189

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| △ | - 0.143 | 0.399 | 0.228 |
| ○ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 9.979 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

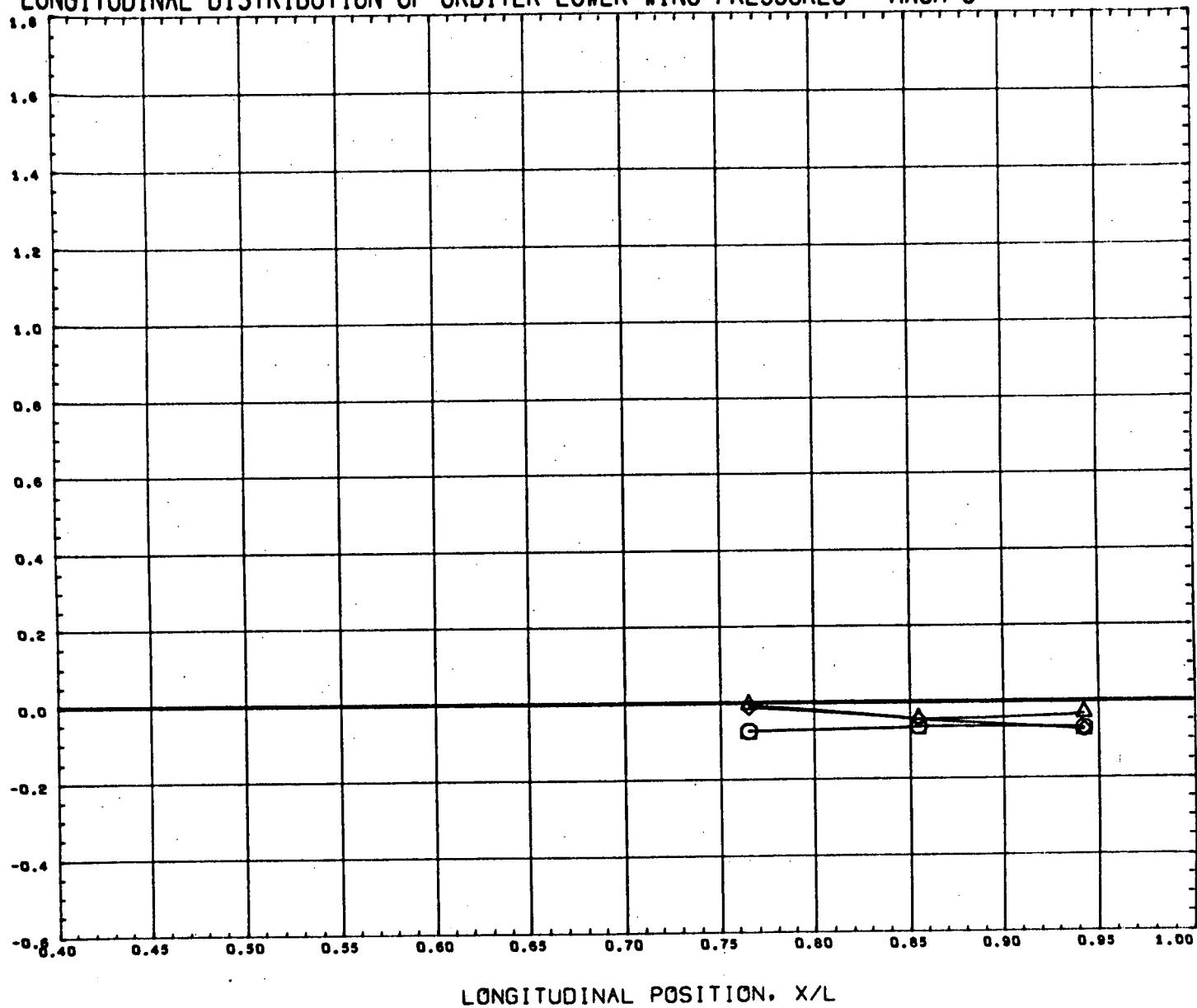
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8311•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT - CP



SYMBOL DELTAX Y/B DELTAZ
 □ - 0.143 0.568 0.228
 △ 0.103
 ◇ 0.226

PARAMETRIC VALUES
 ALPHAB = 9.979 MACH = 3.000
 ALPHAI = 0.000 ORBPOW = 100.000
 BSTPOW = 50.000

REFERENCE FILE

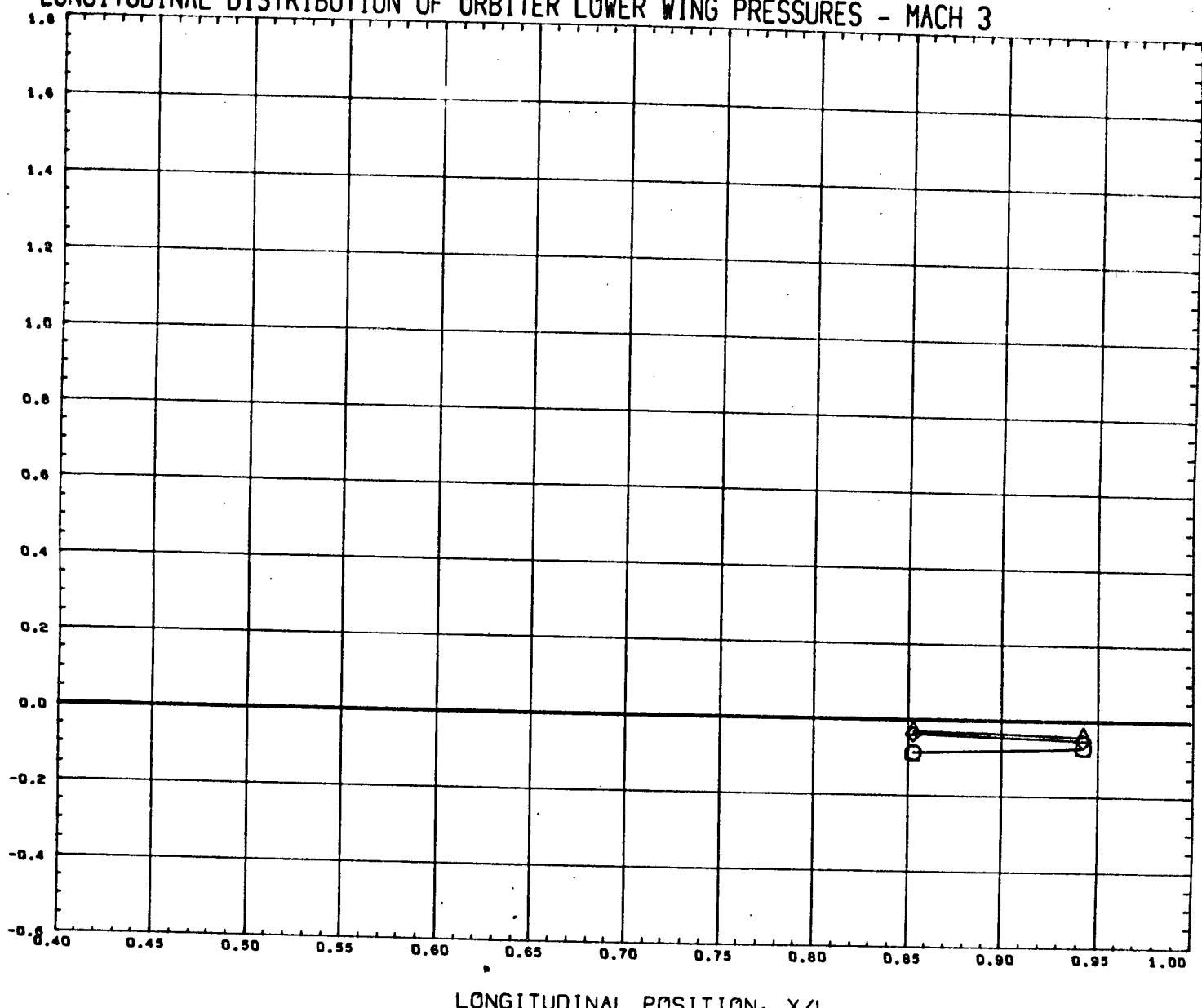
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8311•

PAGE 191

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



| SYMBOL | DELTA X | Y/B | DELTA Z |
|------------|---------|-------|---------|
| Δ | -0.143 | 0.738 | 0.228 |
| \diamond | 0.103 | | |
| \diamond | 0.226 | | |

LONGITUDINAL POSITION. X/L

| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|---------|
| ALPHAB | -9.979 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

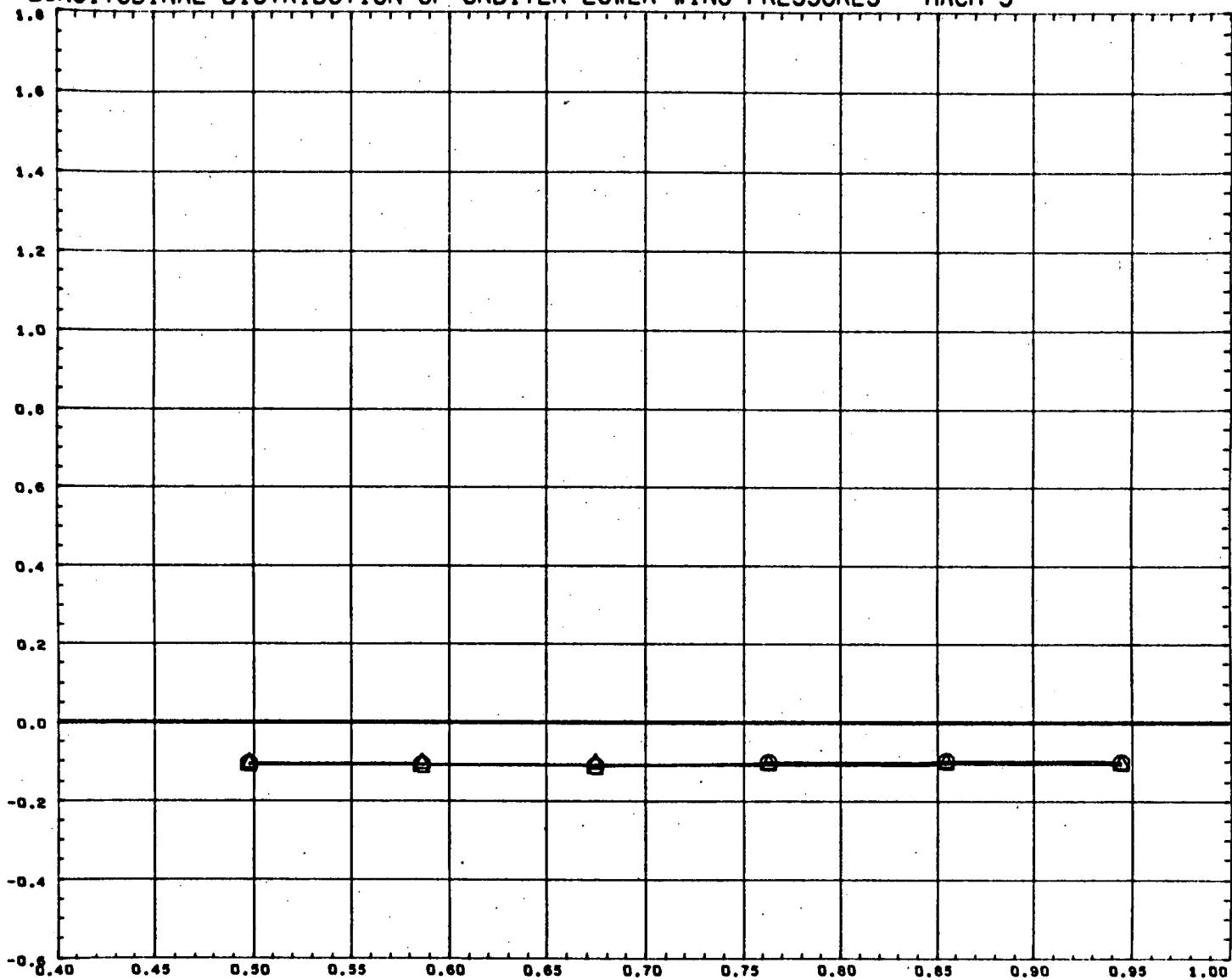
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8311•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| O | 0.390 | 0.230 | 0.908 |
| △ | 0.480 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|----------------|
| ALPHAB | - 9.979 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

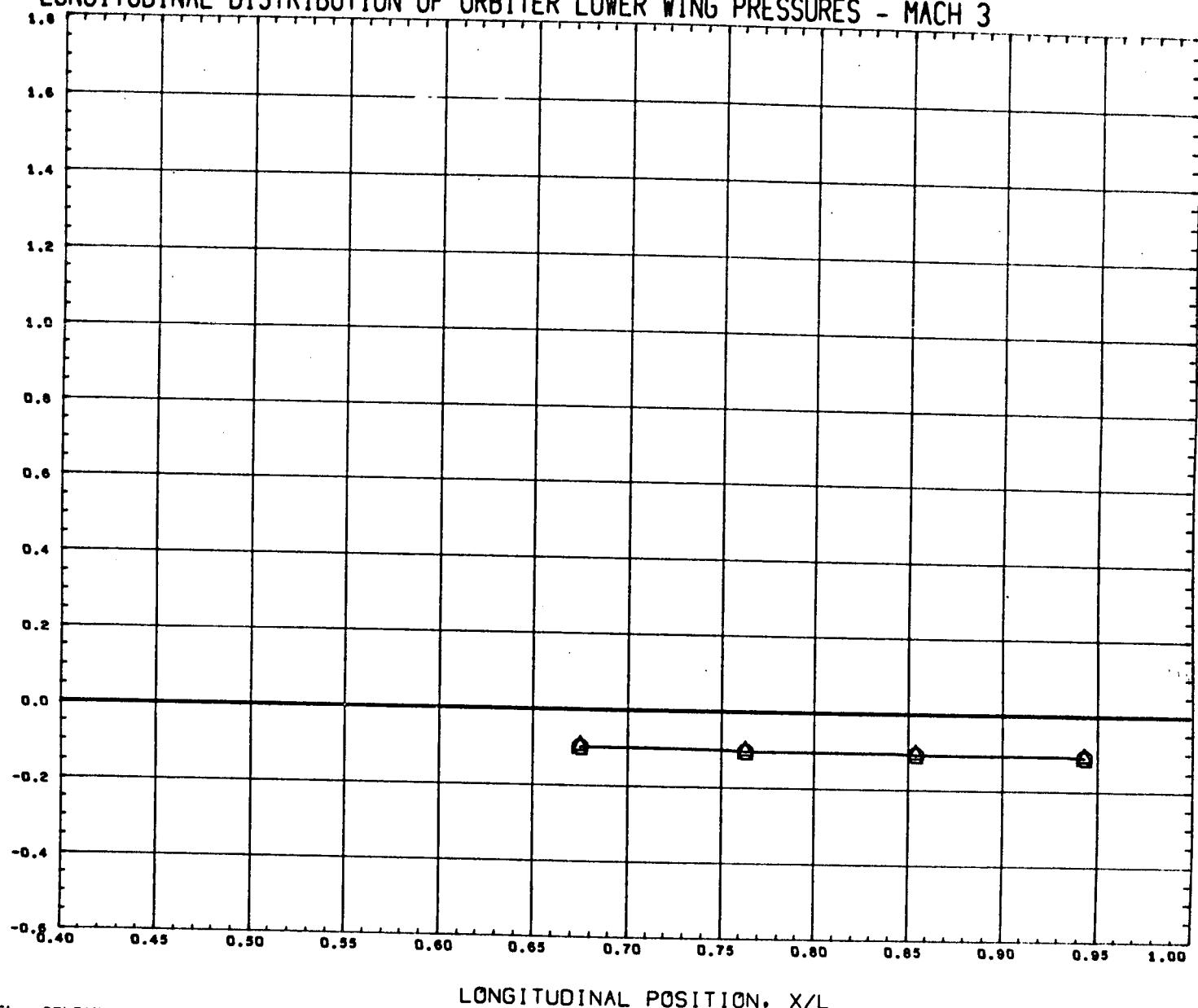
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8311•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
△ - 0.390 0.399 0.908
 0.460

LONGITUDINAL POSITION, X/L

| | ALPHAB | MACH | 3.000 |
|--|--------|--------|---------|
| | ALPHAI | ORBPOW | 100.000 |
| | BSTPOW | | 50.000 |

REFERENCE FILE

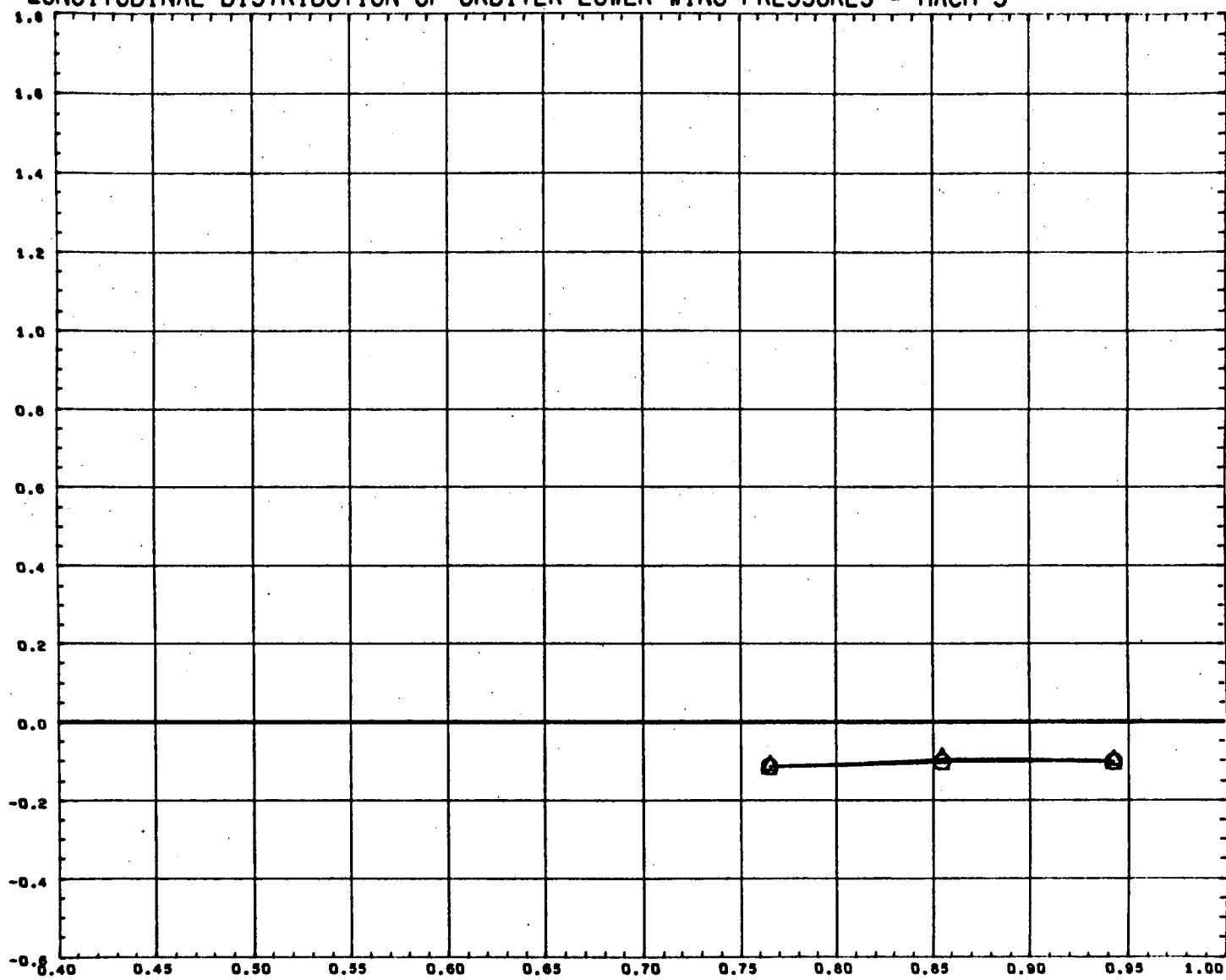
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8311•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| O | - 0.390 | 0.568 | 0.908 |
| △ | 0.480 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 9.979 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

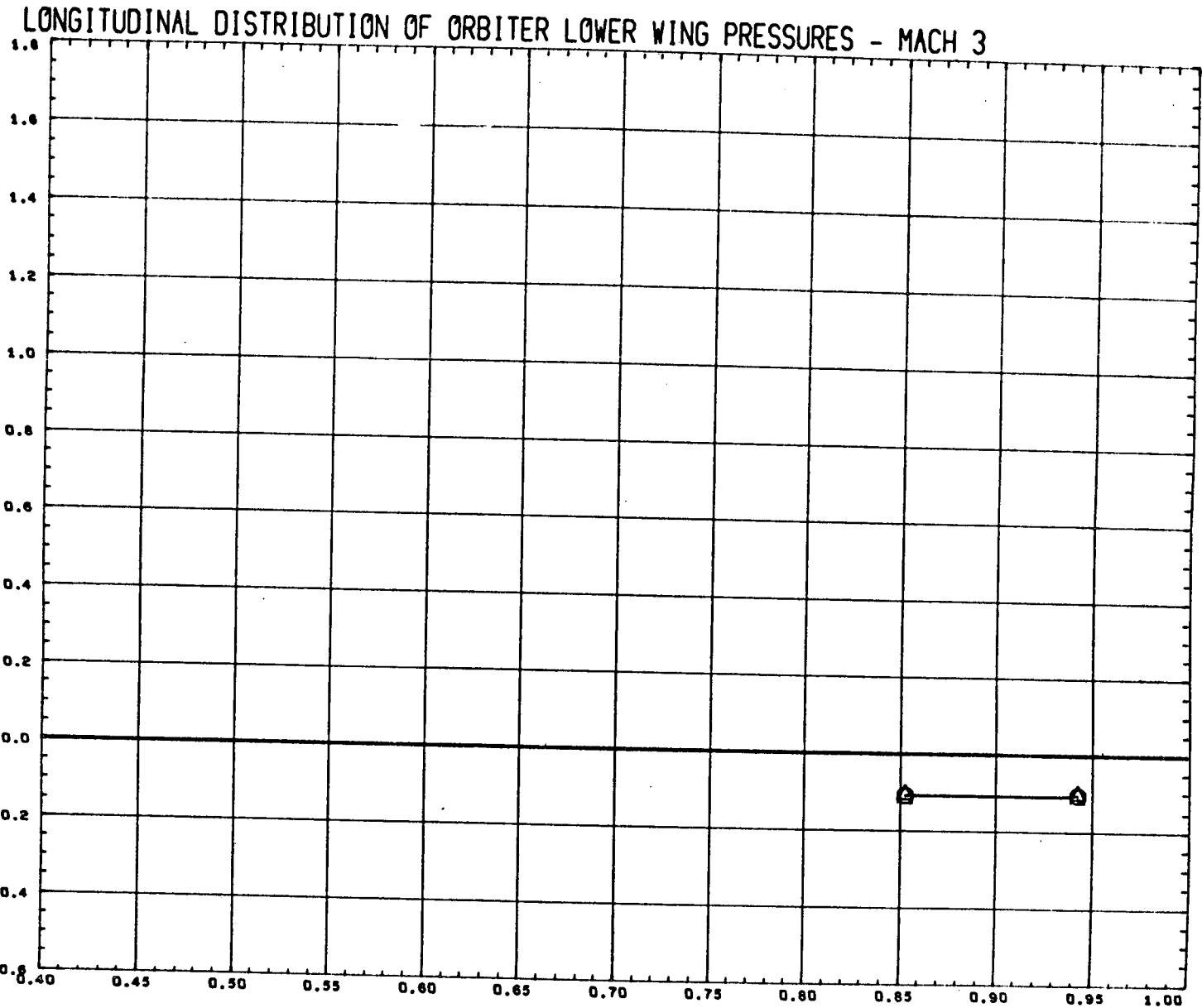
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8311•

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PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
○ - 0.390 0.738 0.908
△ 0.480

PARAMETRIC VALUES
ALPHAB - 9.979 MACH 3.000
ALPHAI 0.000 ORBPOW 100.000
BSTPOW 50.000

REFERENCE FILE

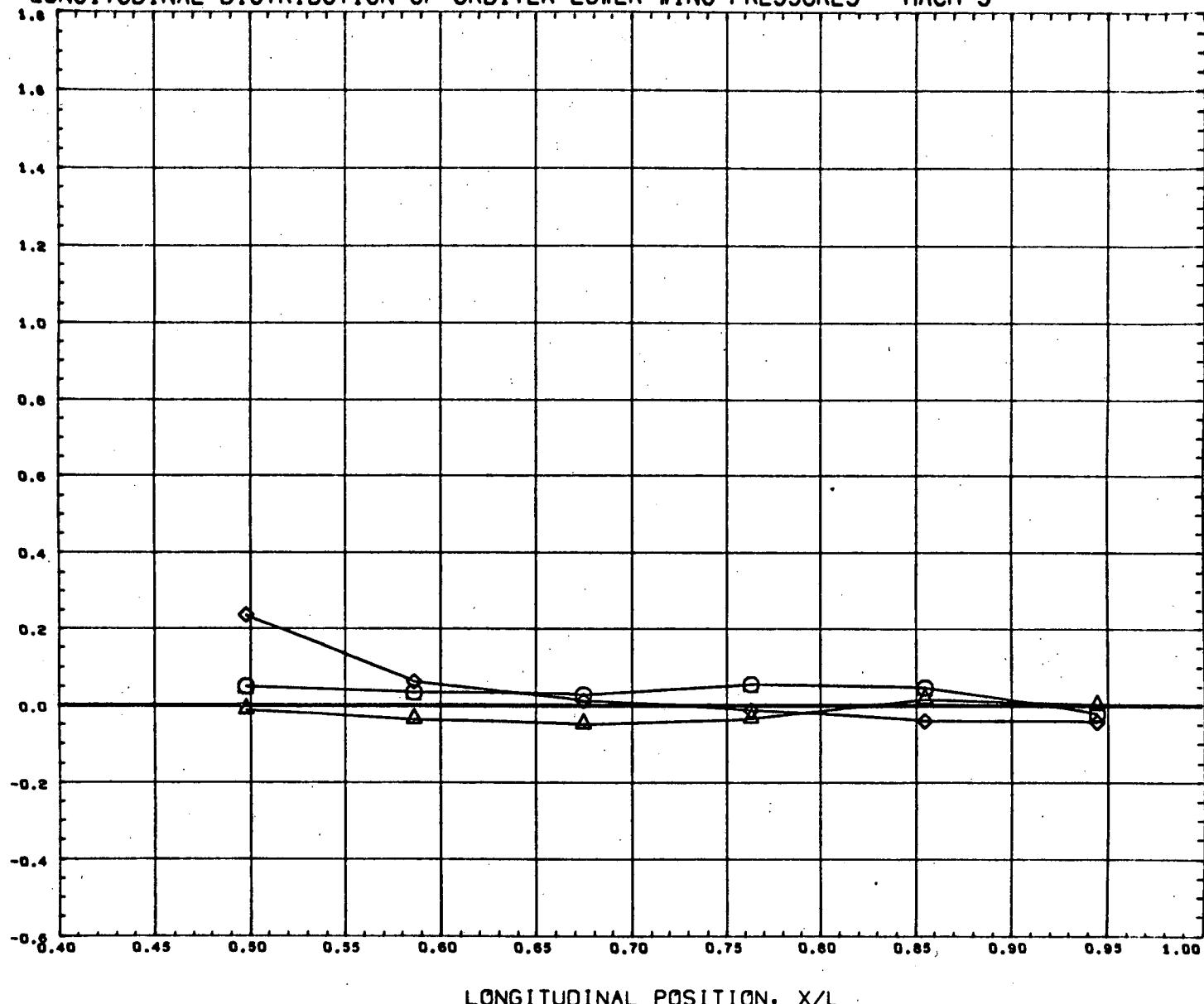
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8311•

PAGE 196

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAYZ |
|-------------|---------|-------|---------|
| \circ | - 0.143 | 0.230 | 0.120 |
| \triangle | 0.103 | | |
| \diamond | 0.226 | | |

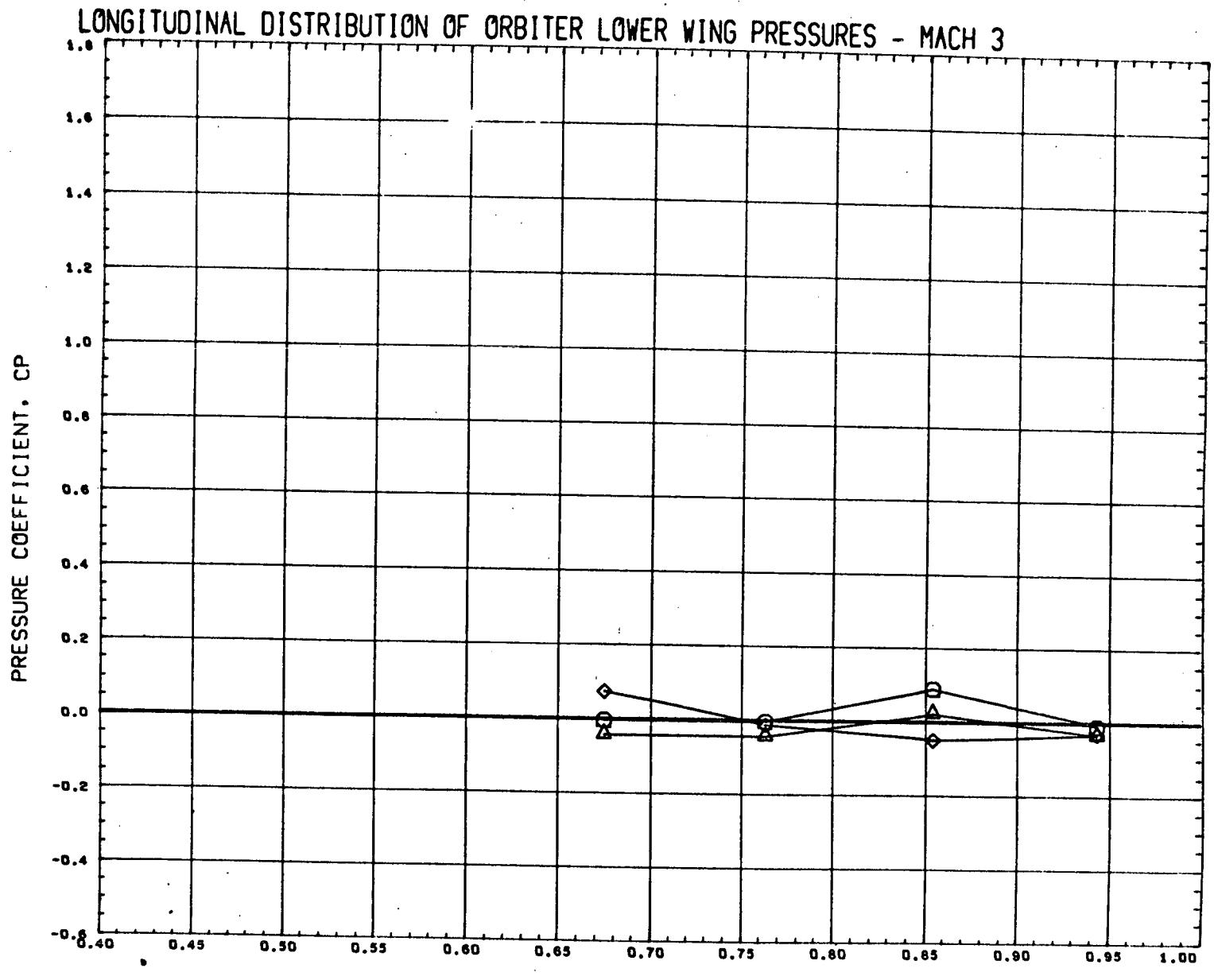
| PARAMETRIC VALUES | | |
|-------------------|---------|----------------|
| ALPHAB | - 4.945 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8312•

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| PARAMETRIC VALUES | | |
|-------------------|---------|----------------|
| ALPHAB | - 4.945 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

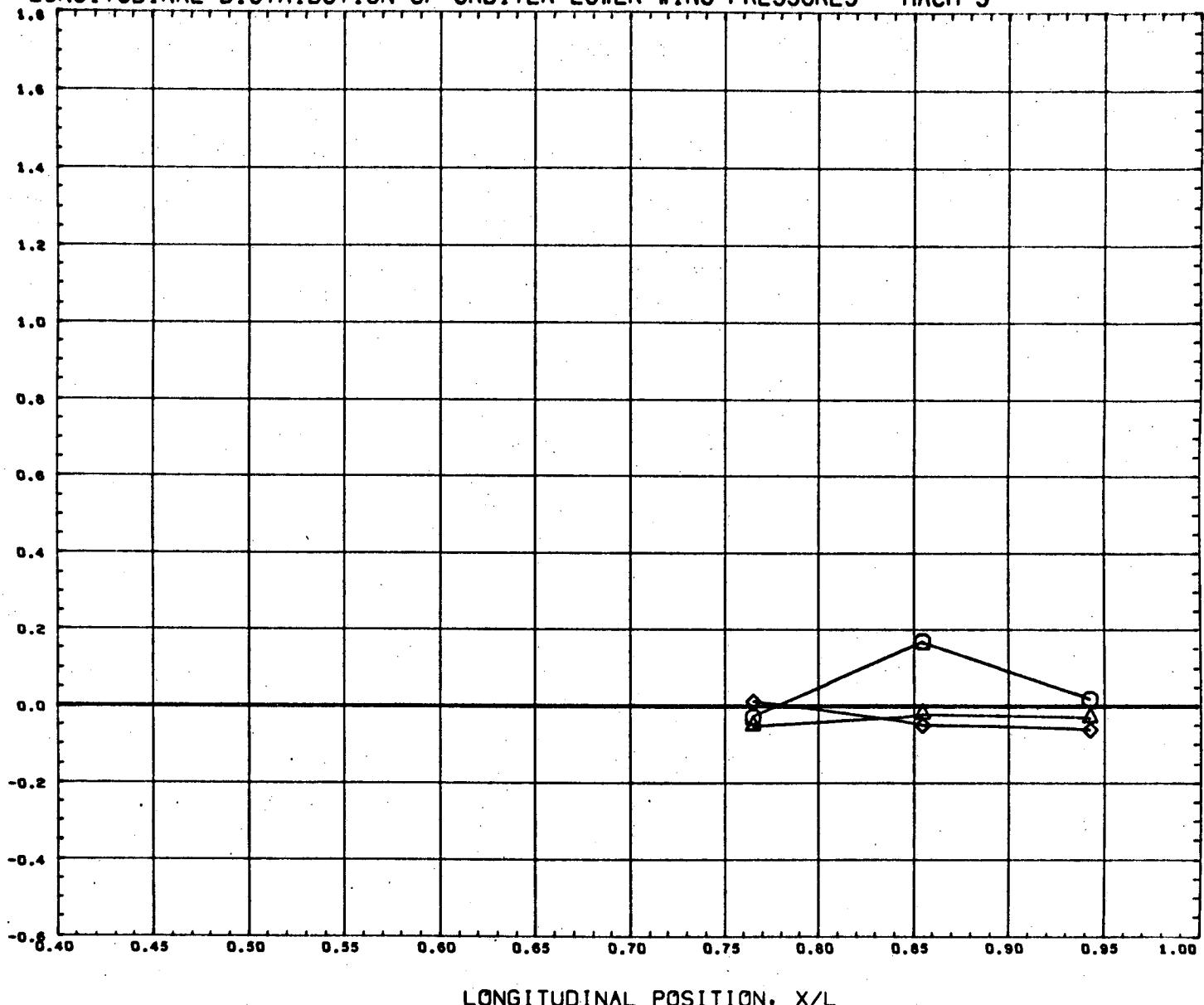
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8312•

PAGE 198

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| O | - 0.143 | 0.568 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|----------------|
| ALPHAB | - 4.945 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

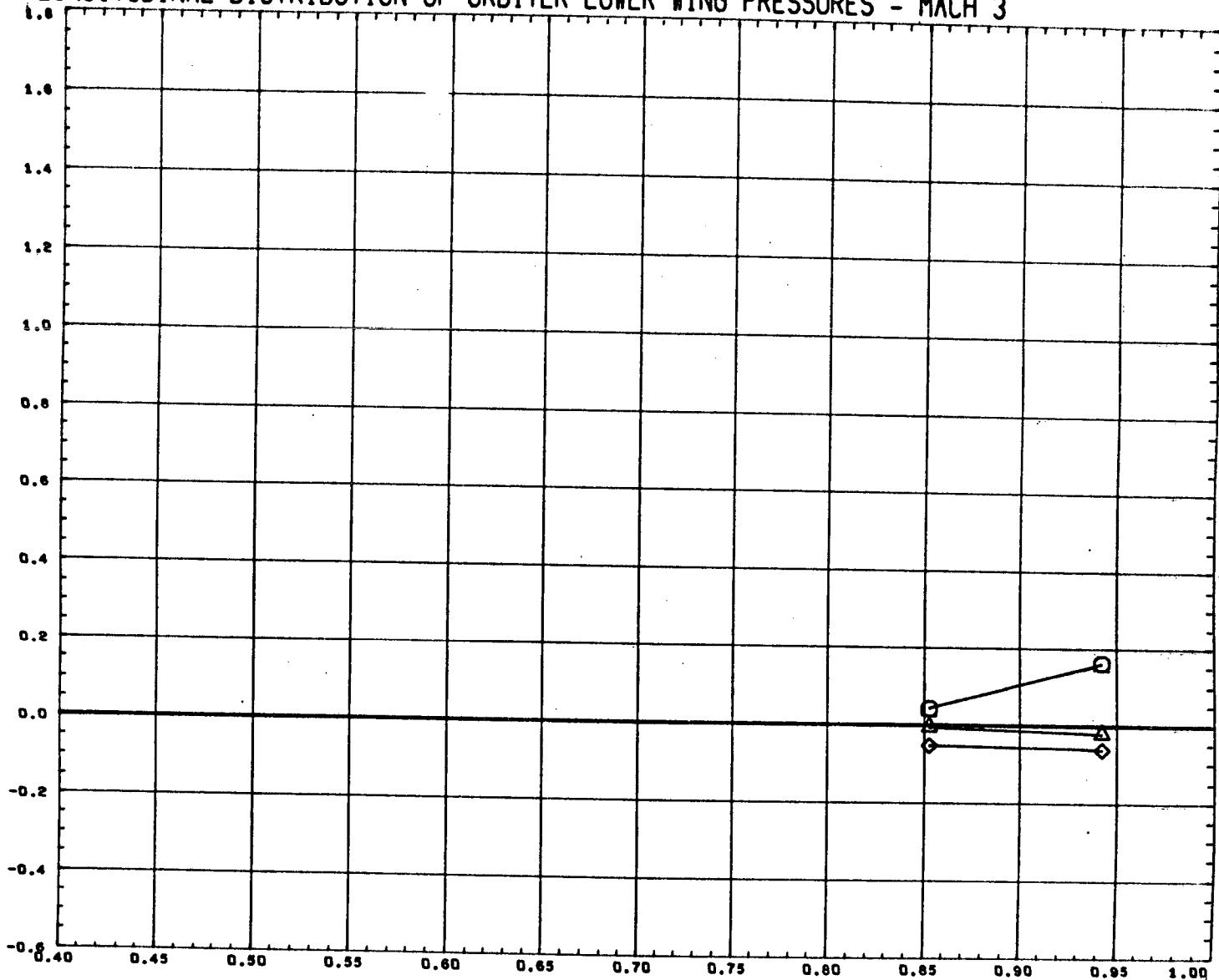
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8312•

PAGE 199

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 0.736 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|----------------|
| ALPHAB | - 4.945 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

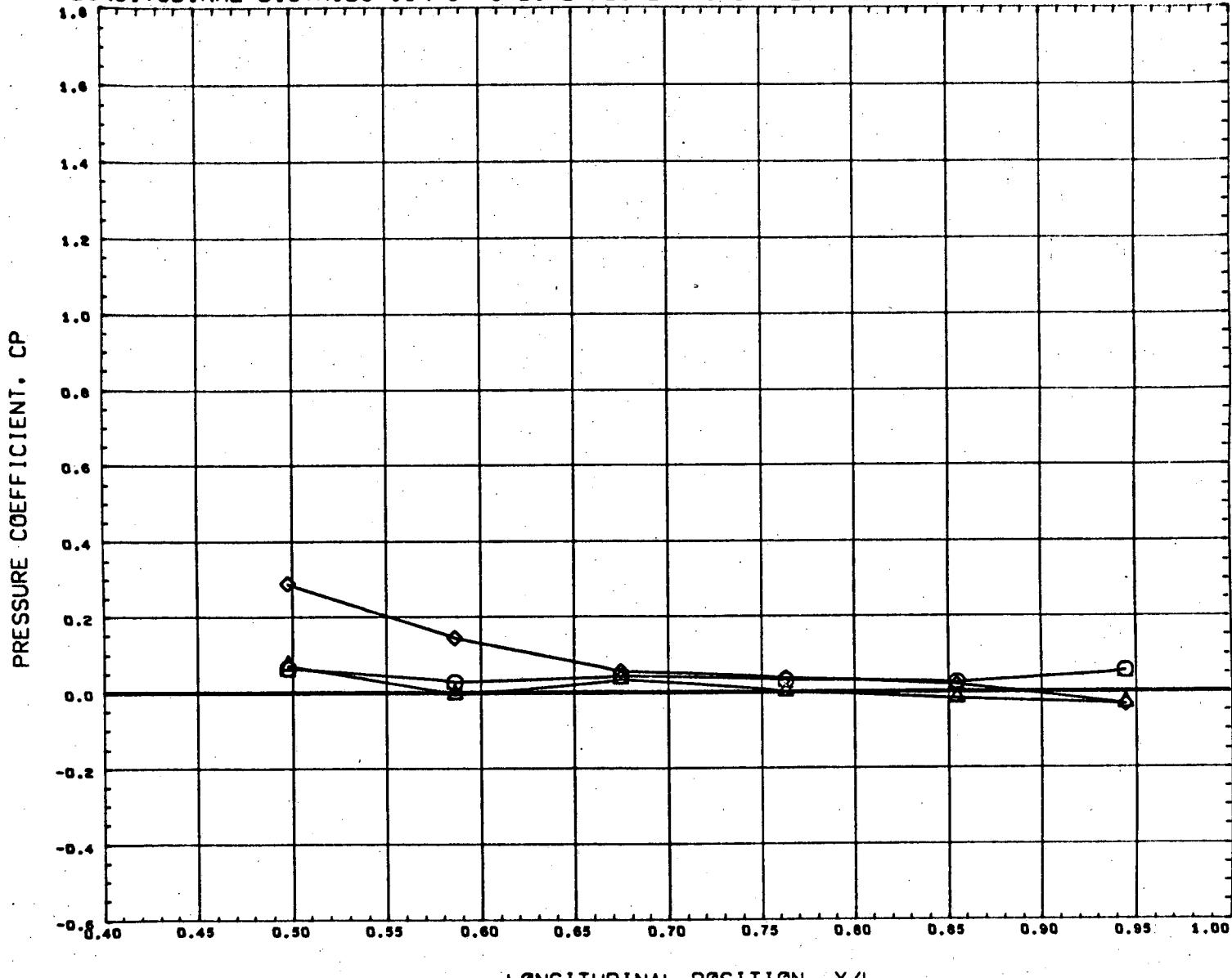
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8312•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 □ 0.143 0.230 0.151
 ○ 0.103 0.227

| | | |
|-------------------|---------|----------------|
| PARAMETRIC VALUES | | |
| ALPHAB | - 4.945 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

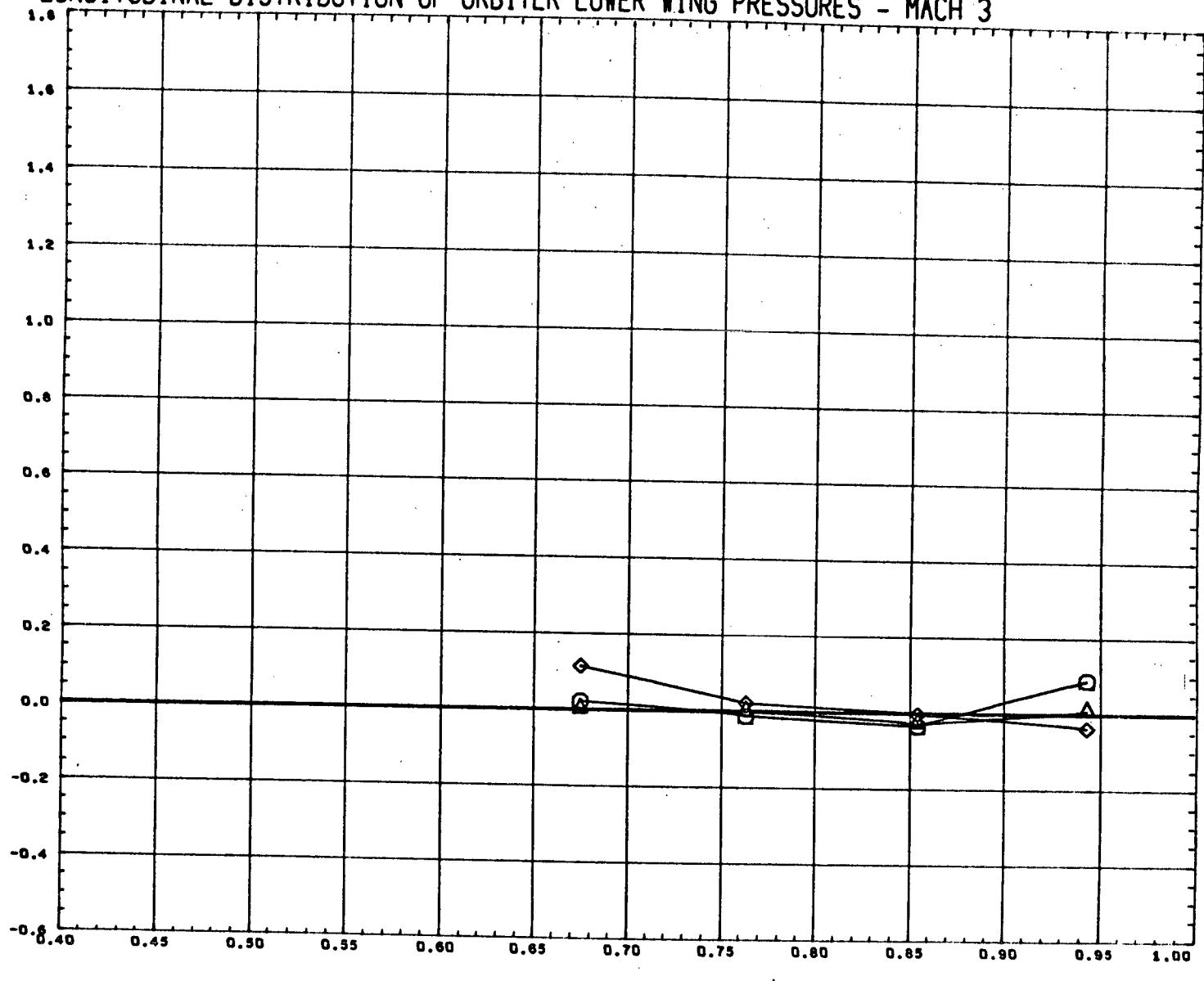
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8312•

PAGE 201

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX Y/B DELTAZ
 □ - 0.143 0.399 0.151
 △ 0.103 0.227
 ◇ 0.227

LONGITUDINAL POSITION. X/L

PARAMETRIC VALUES
 ALPHAB = 4.945 MACH 3.000
 ALPHAI = 0.000 ORBPOW 100.000
 BSTPOW 50.000

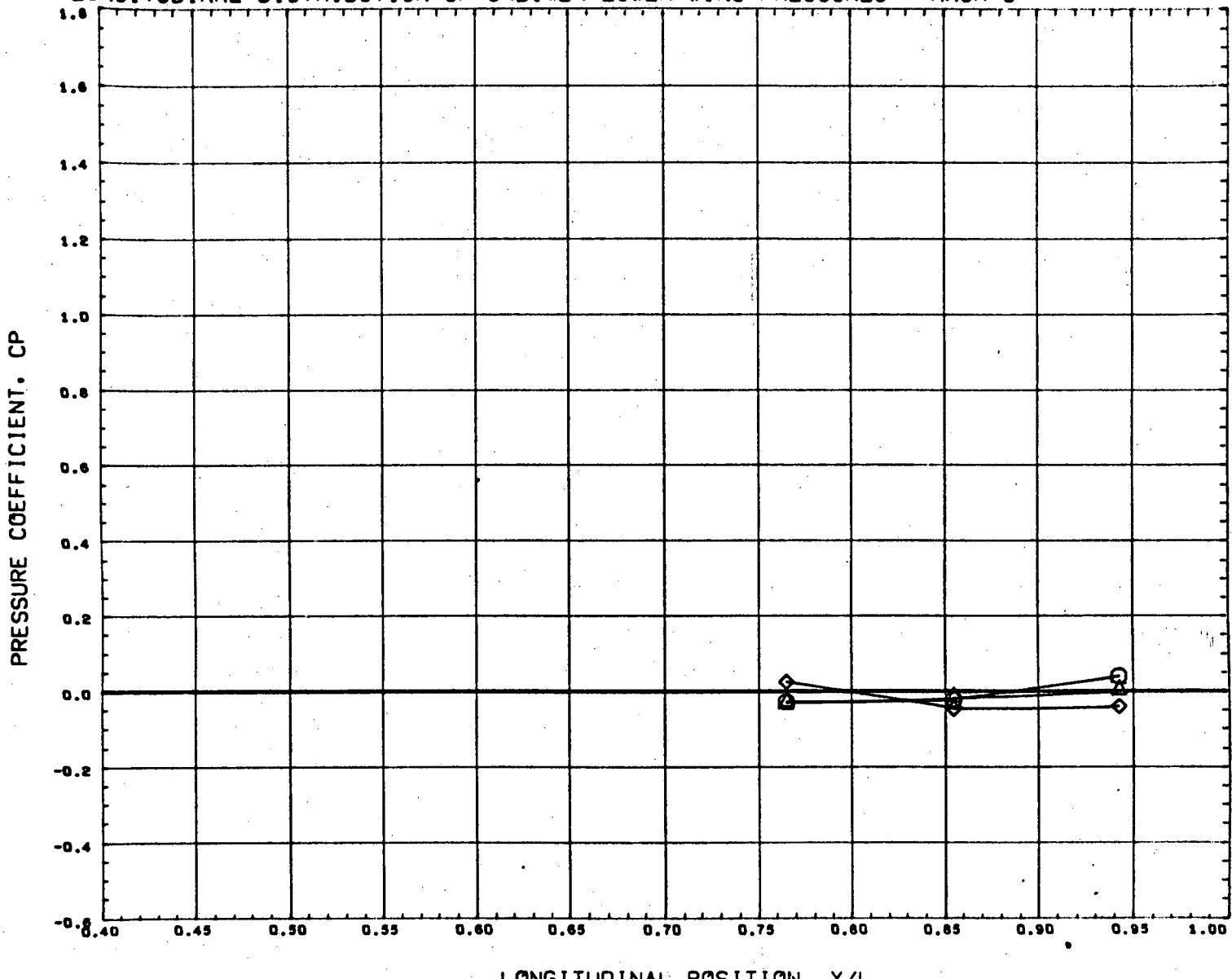
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8312•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

- - 0.143 0.566 0.151
- △ - 0.103
- ◊ - 0.227

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|---------|----------------|
| ALPHAB | = 4.945 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

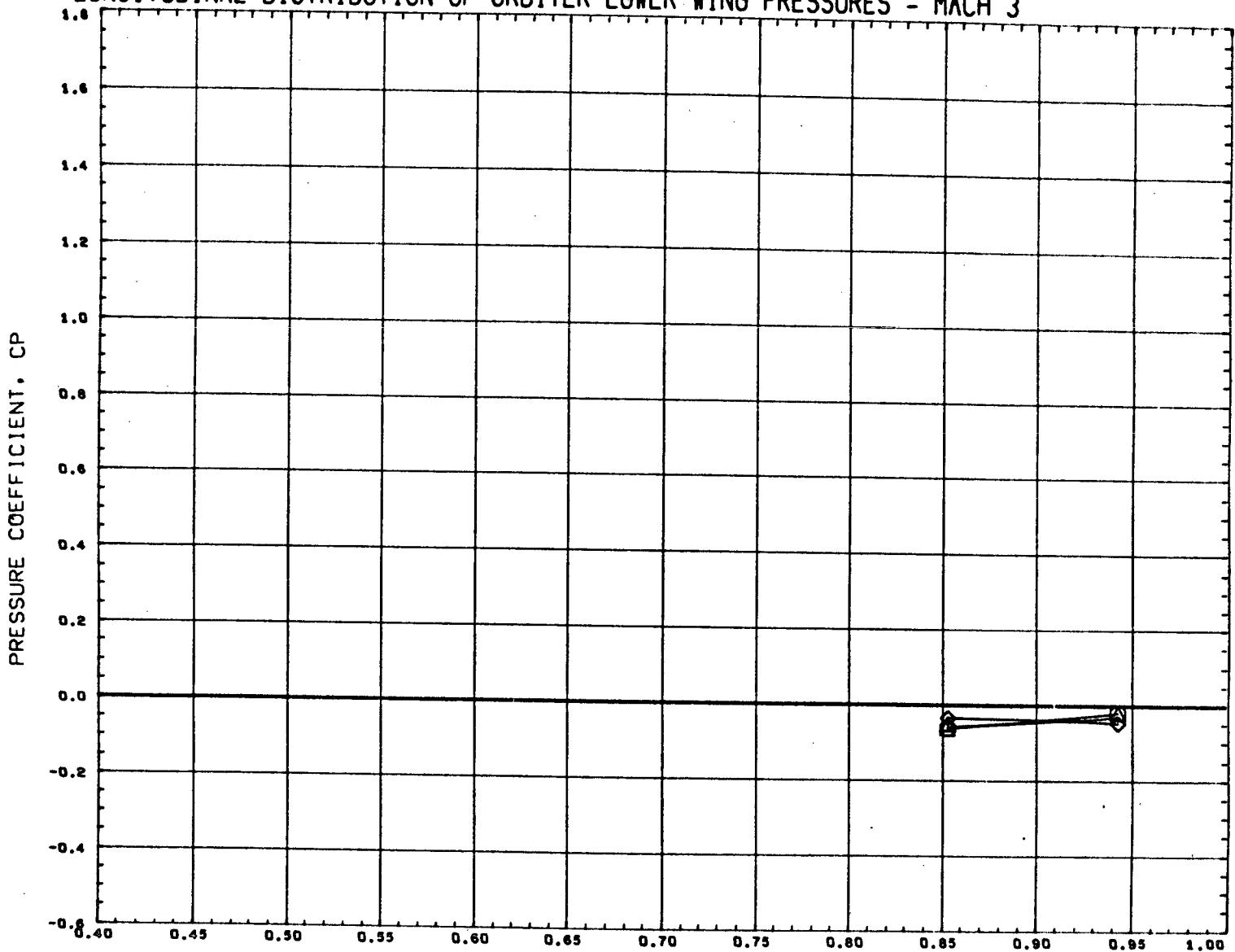
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8312•

PAGE 203

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 0.738 | 0.151 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|---------|
| ALPHAB | - 4.945 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

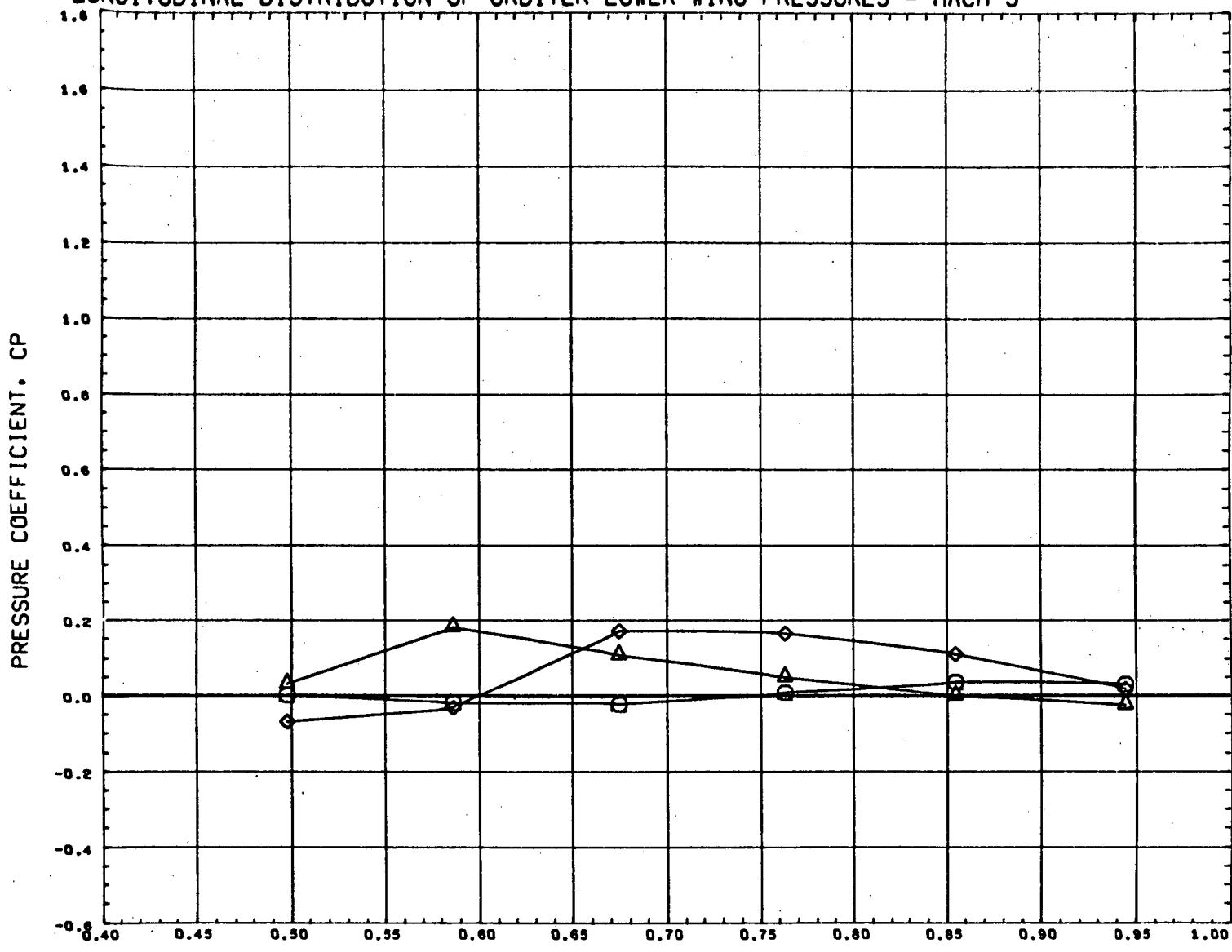
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8312•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| △ | - 0.143 | 0.230 | 0.228 |
| ○ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 4.945 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

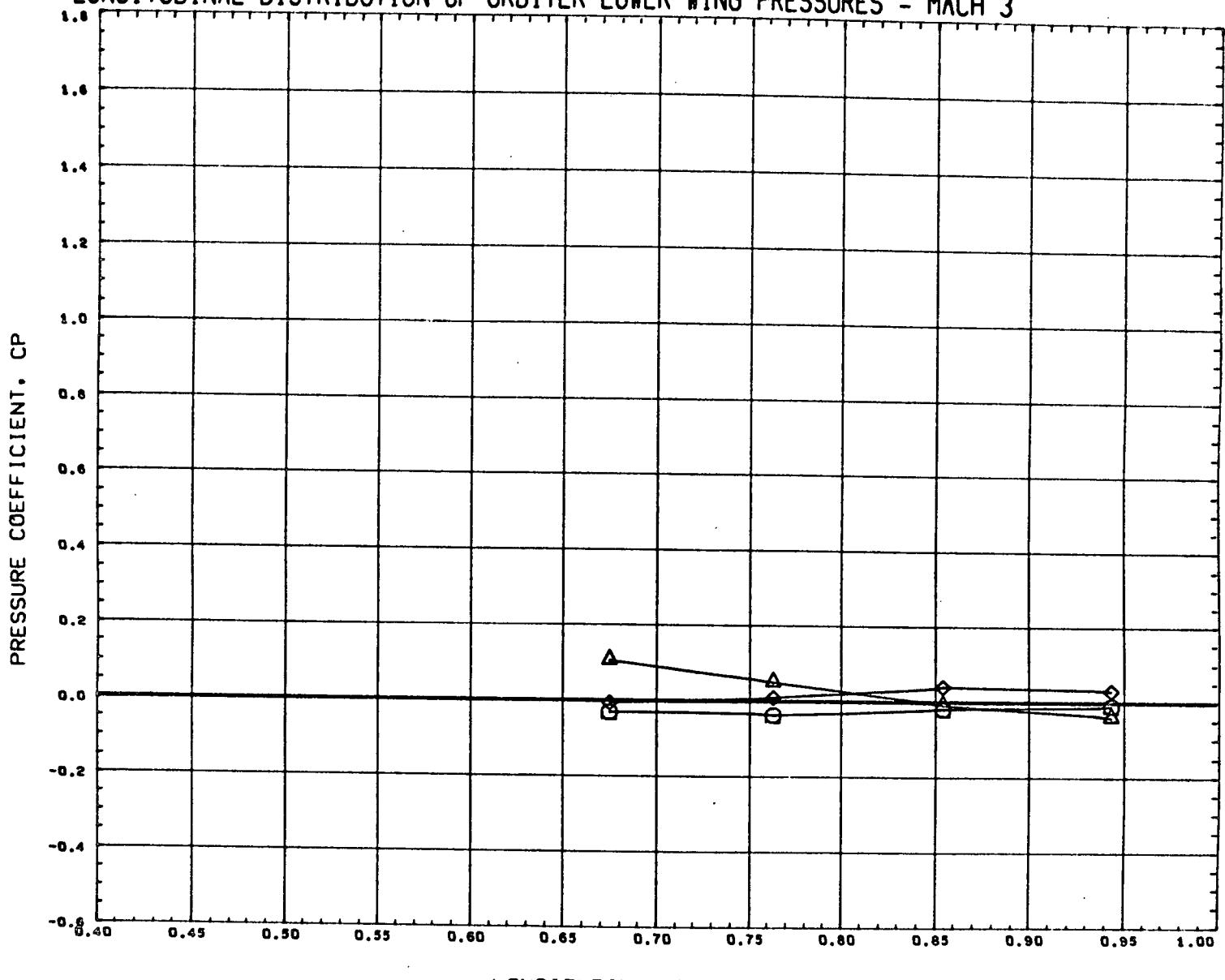
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8312•

PAGE 205

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

- - 0.143 0.399 0.228
- △ 0.103
- ◊ 0.226

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|---------|----------------|
| ALPHAB | - 4.945 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

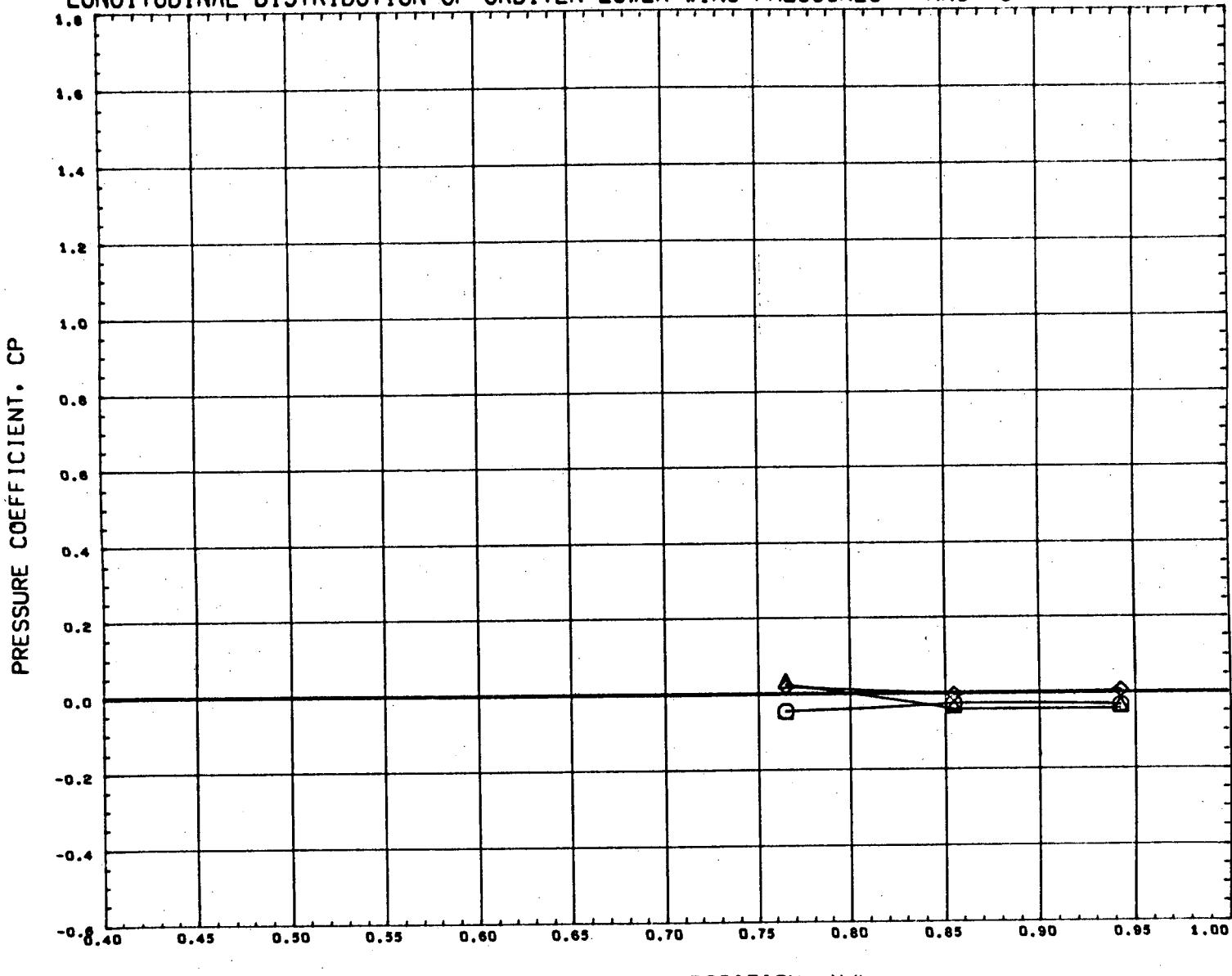
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8312•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



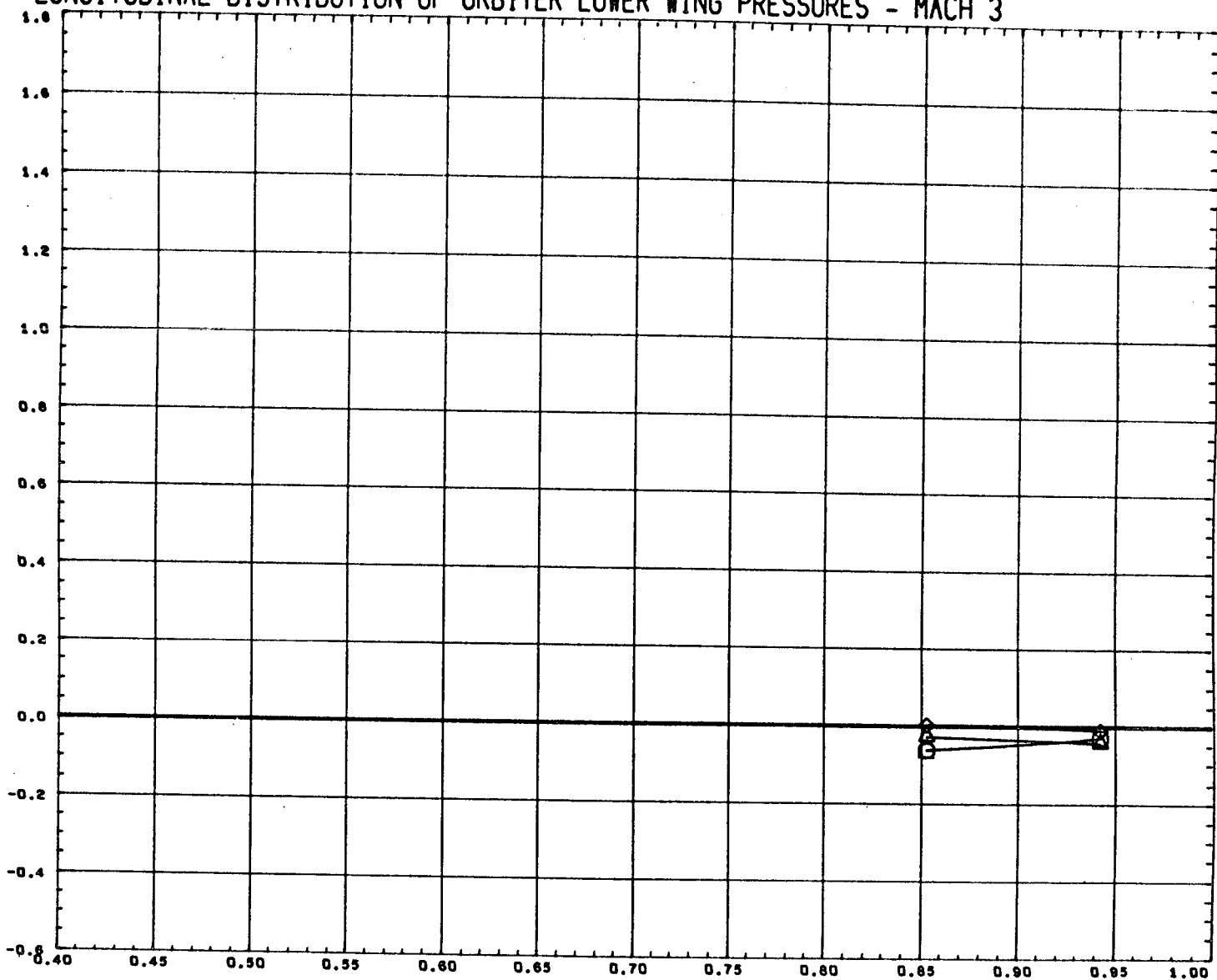
REFERENCE FILE
 AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8312•

PAGE 207

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.143 | 0.738 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 4.945 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

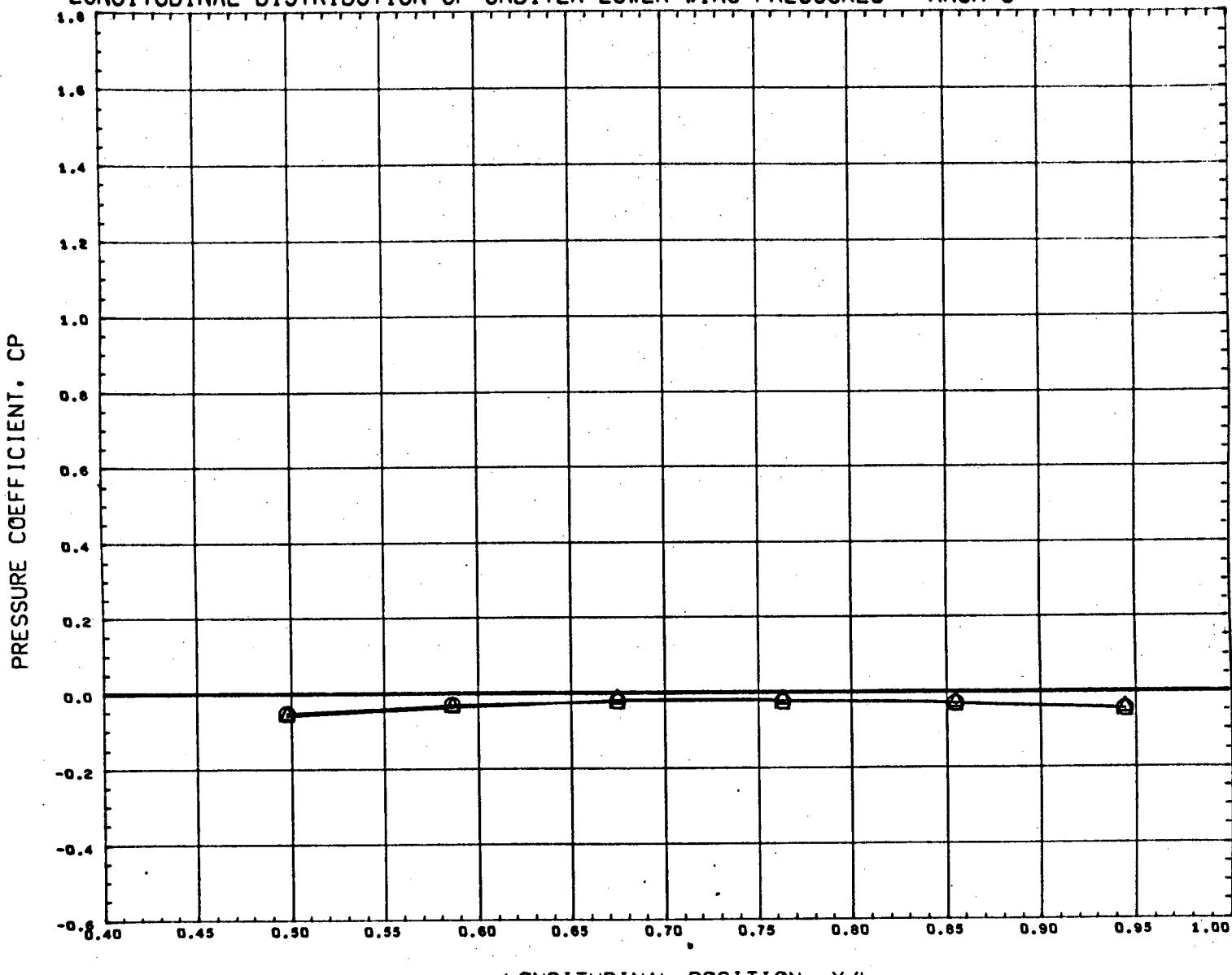
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8312•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



REFERENCE FILE

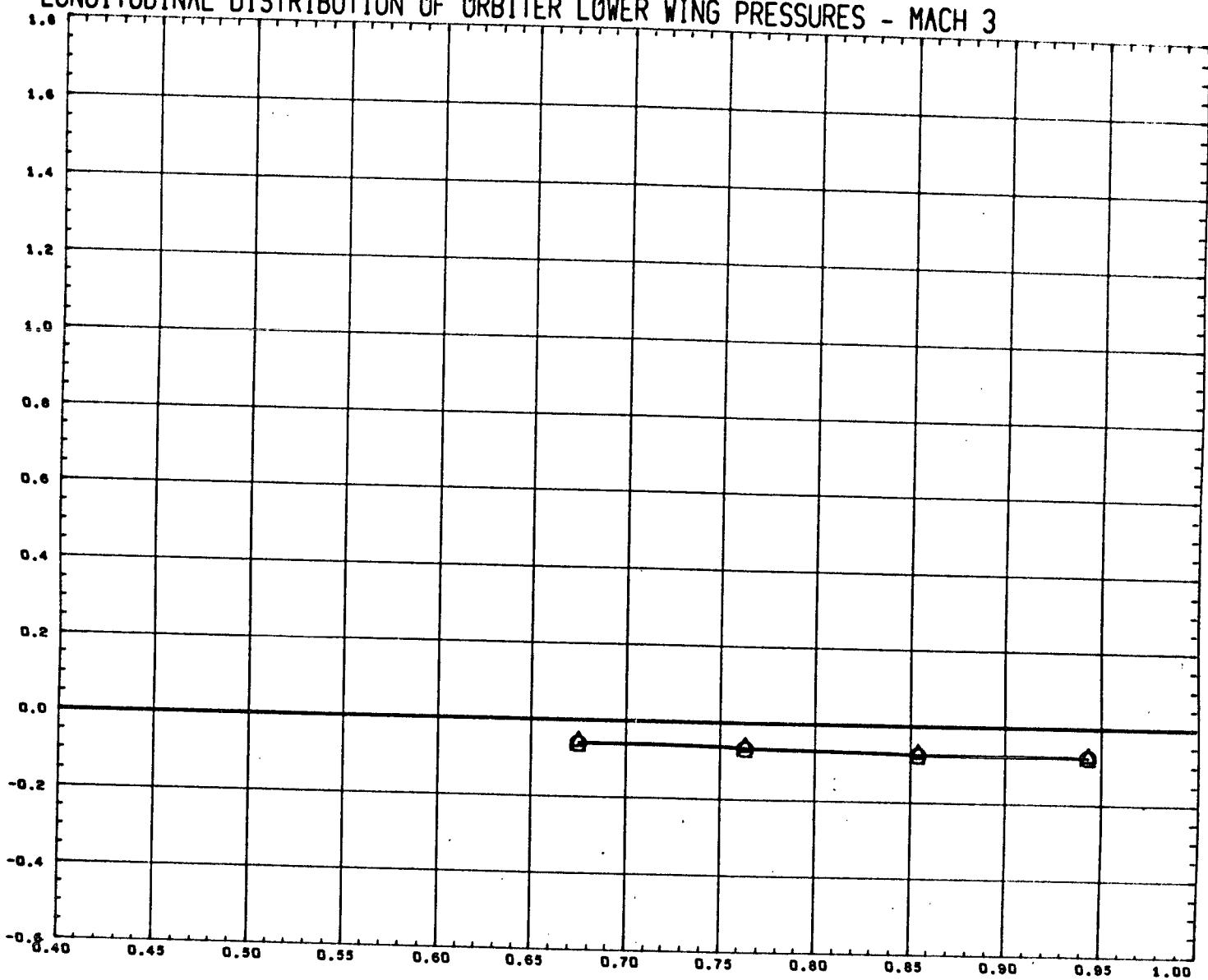
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8312•

PAGE 209

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
△ - 0.390 0.399 0.908
○ 0.478

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|---------|----------------|
| ALPHAB | - 4.945 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

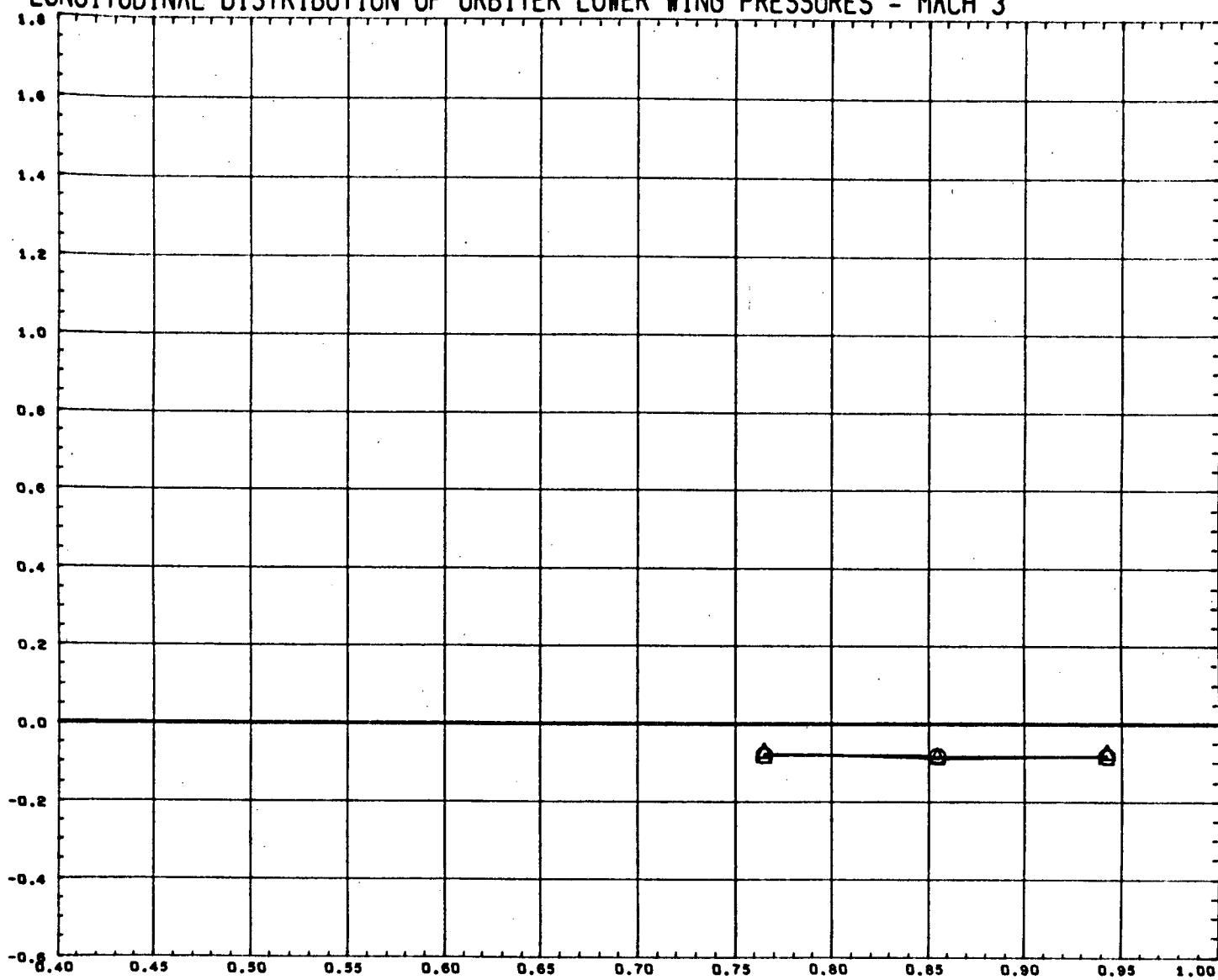
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8312•

PAGE 210

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.390 | 0.568 | 0.908 |
| △ | 0.478 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|----------------|
| ALPHAB | - 4.945 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

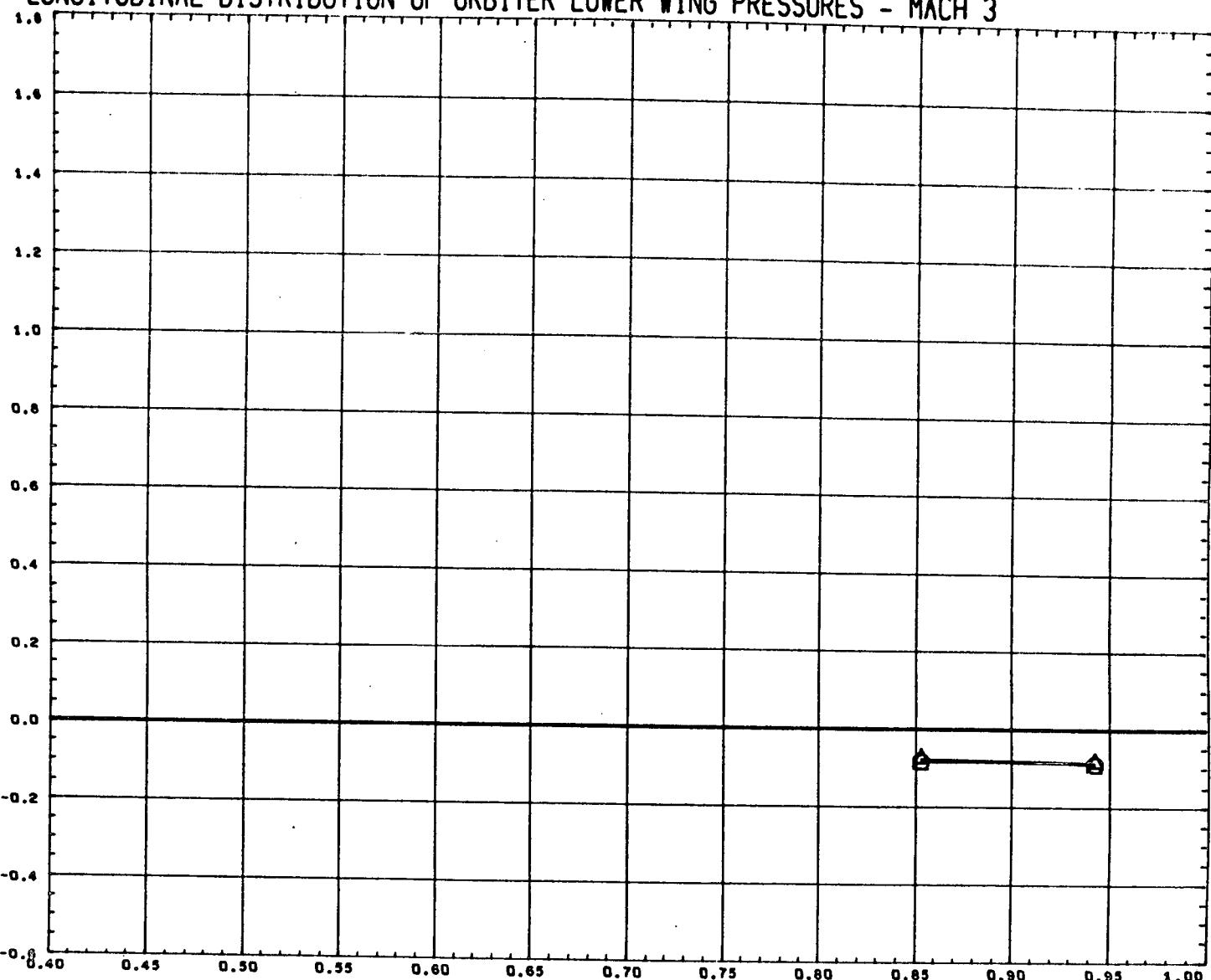
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8312•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

SYMBOL DELTAX Y/B DELTAZ
 ○ - 0.390 0.738 0.908
 △ 0.476

PARAMETRIC VALUES
 ALPHAB = 4.945 MACH = 3.000
 ALPHAI = 0.000 ORBPOW = 100.000
 BSTPOW = 50.000

REFERENCE FILE

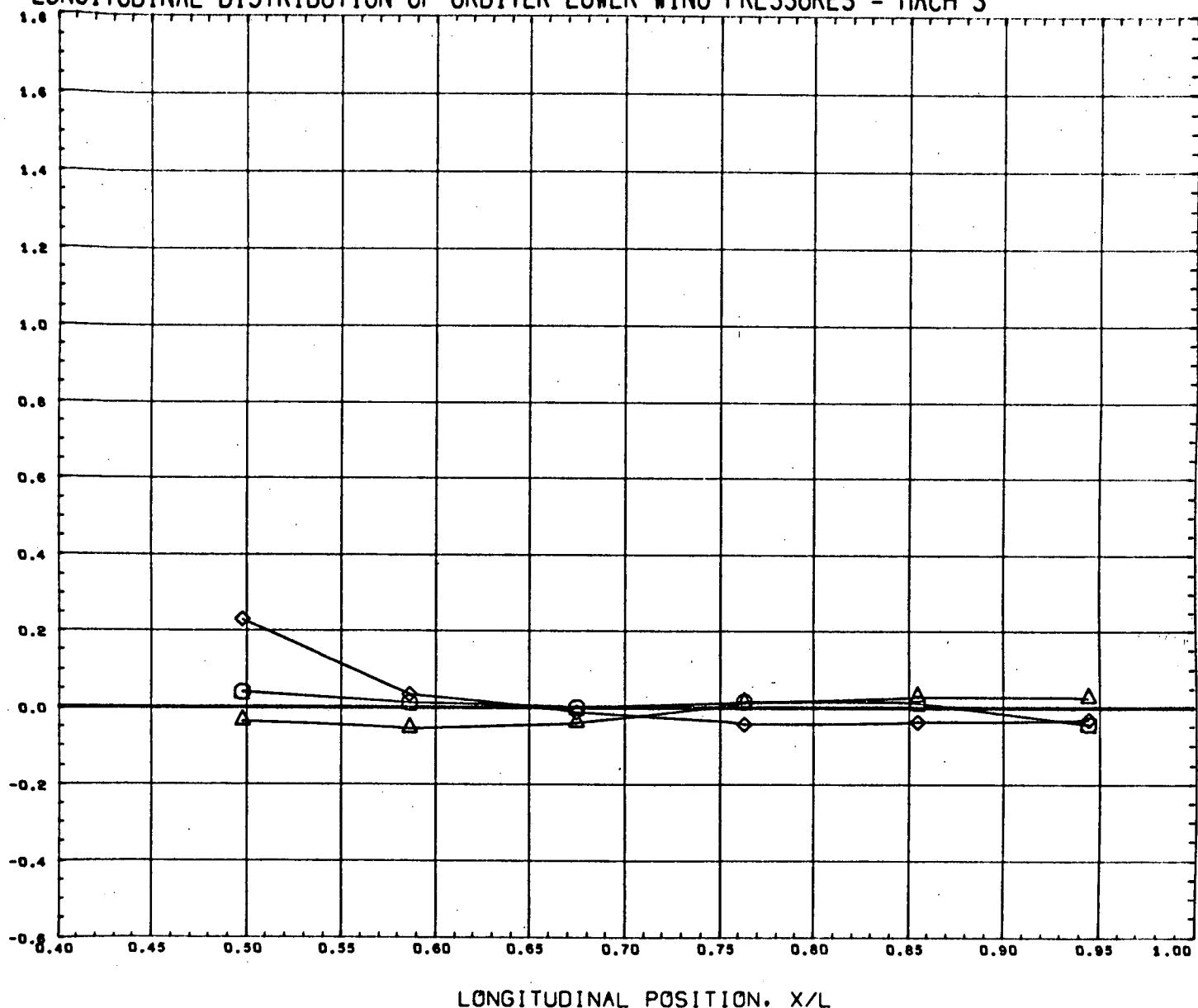
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8312•

PAGE 212

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|-------------|---------|-------|---------|
| \circ | -0.143 | 0.230 | 0.120 |
| \triangle | 0.102 | | |
| \diamond | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 0.008 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

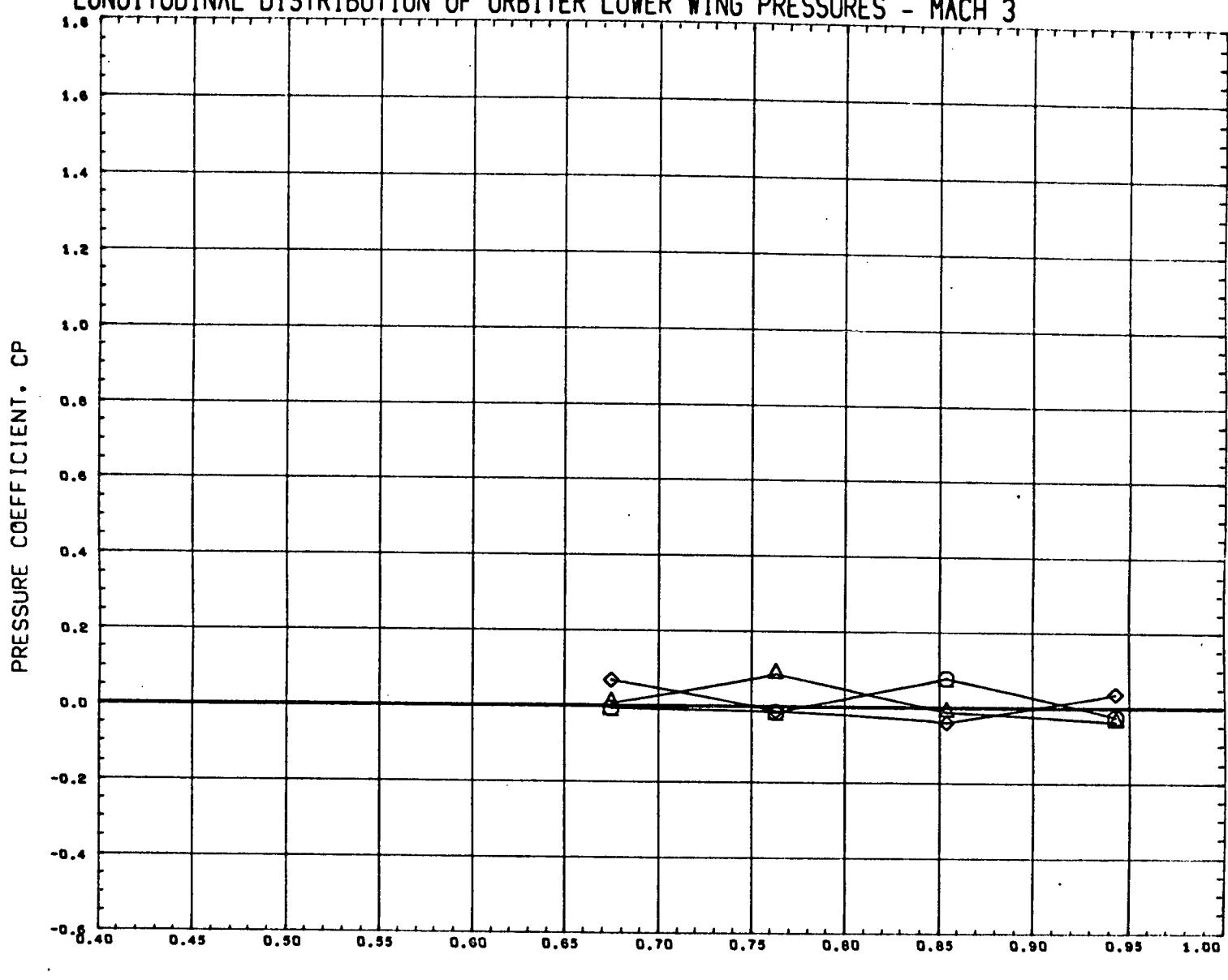
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8313•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|-------------|-------|-------|-------|
| \triangle | 0.143 | 0.399 | 0.120 |
| \square | 0.102 | | |
| \diamond | 0.226 | | |

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 0.008 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

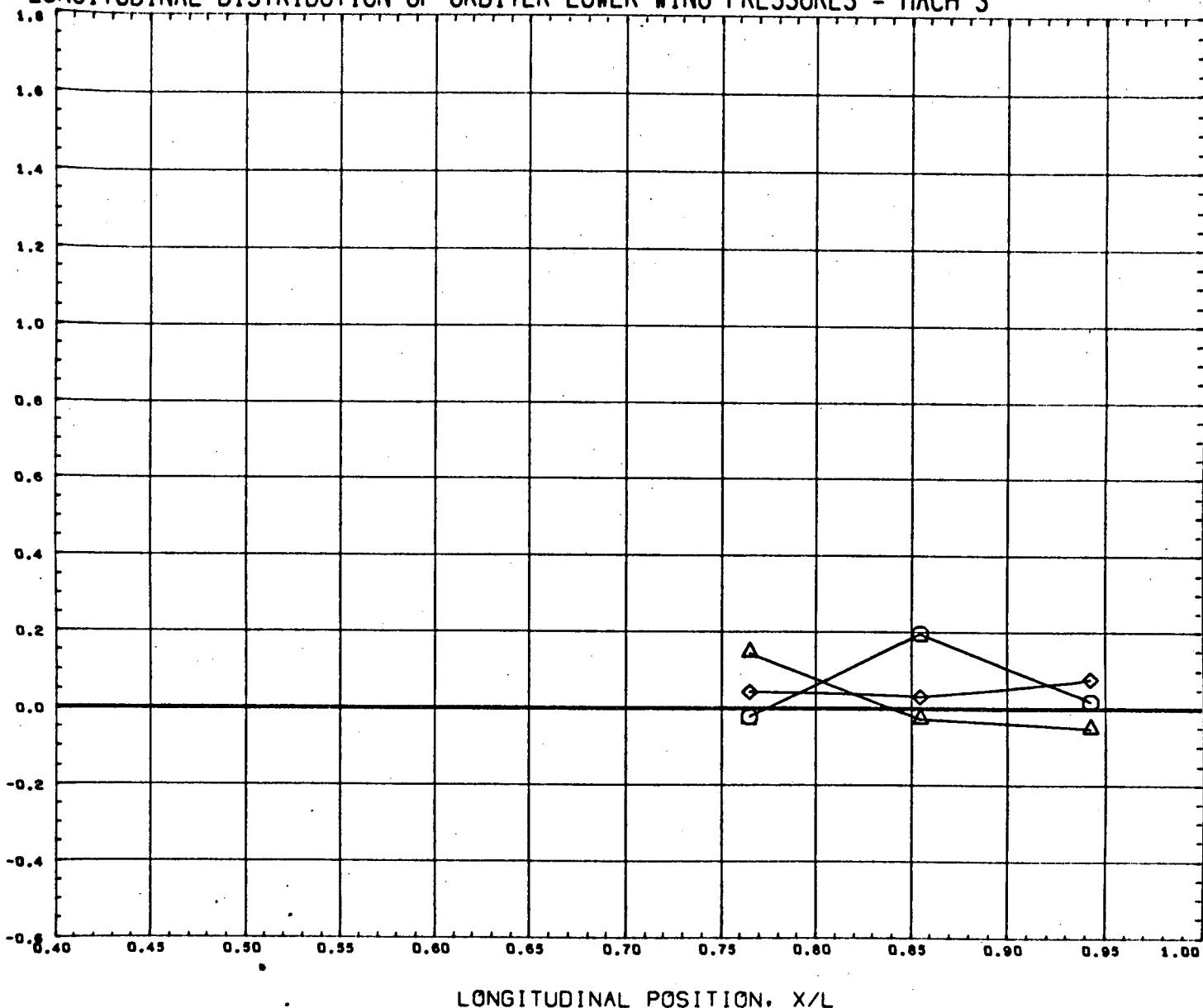
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8313•

PAGE 214

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

\circ -0.143 0.568 0.120
 \triangleright 0.102 0.102 0.226
 \diamond 0.226 0.226 0.226

PARAMETRIC VALUES

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|---------|
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

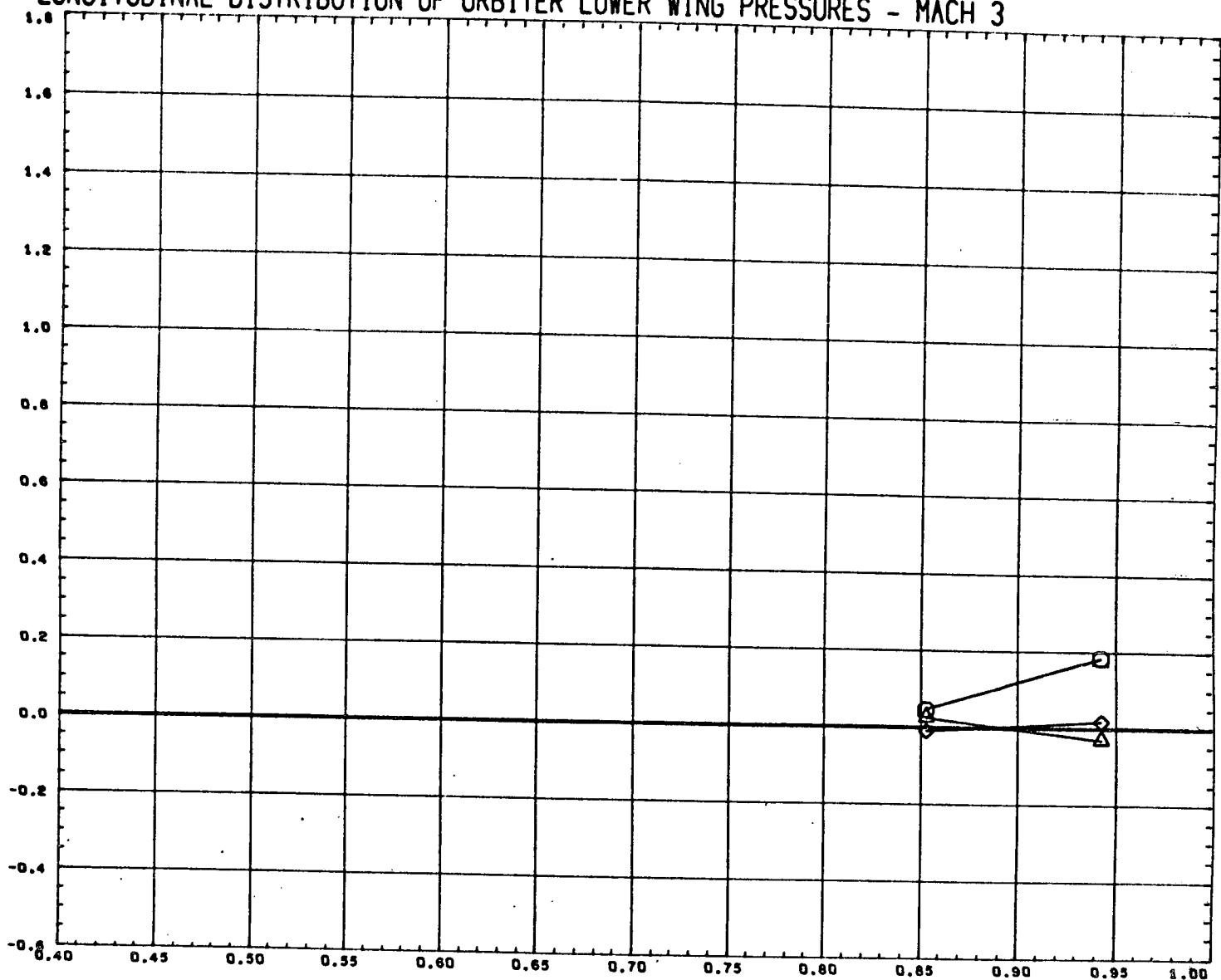
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8313•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ○ | 0.143 | 0.738 | 0.120 |
| △ | 0.102 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 0.008 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

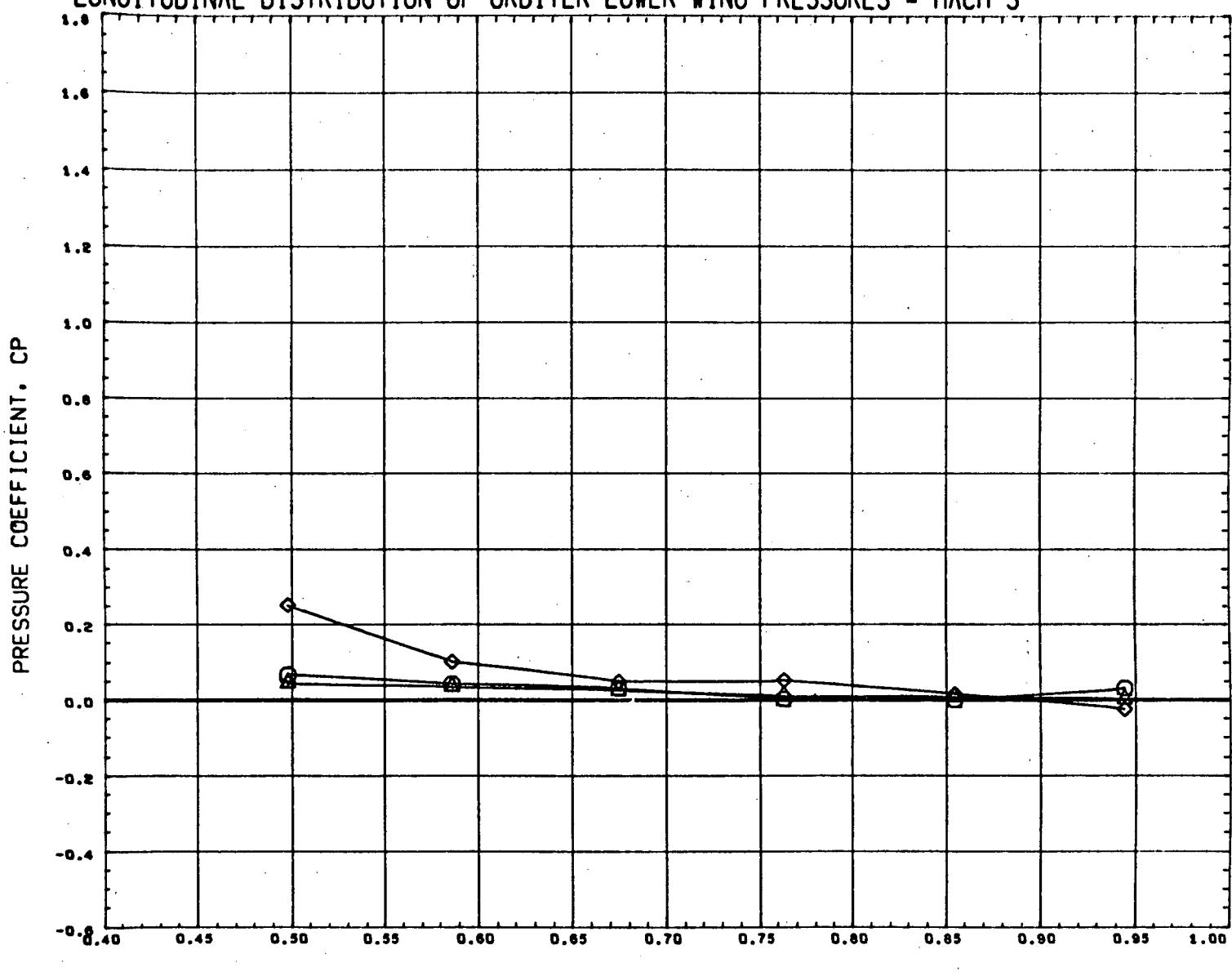
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8313•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O -0.144 0.230 0.151
 □ 0.103 0.000 0.000
 ◇ 0.225 0.000 0.000

PARAMETRIC VALUES
 ALPHAB 0.008 MACH 3.000
 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

REFERENCE FILE

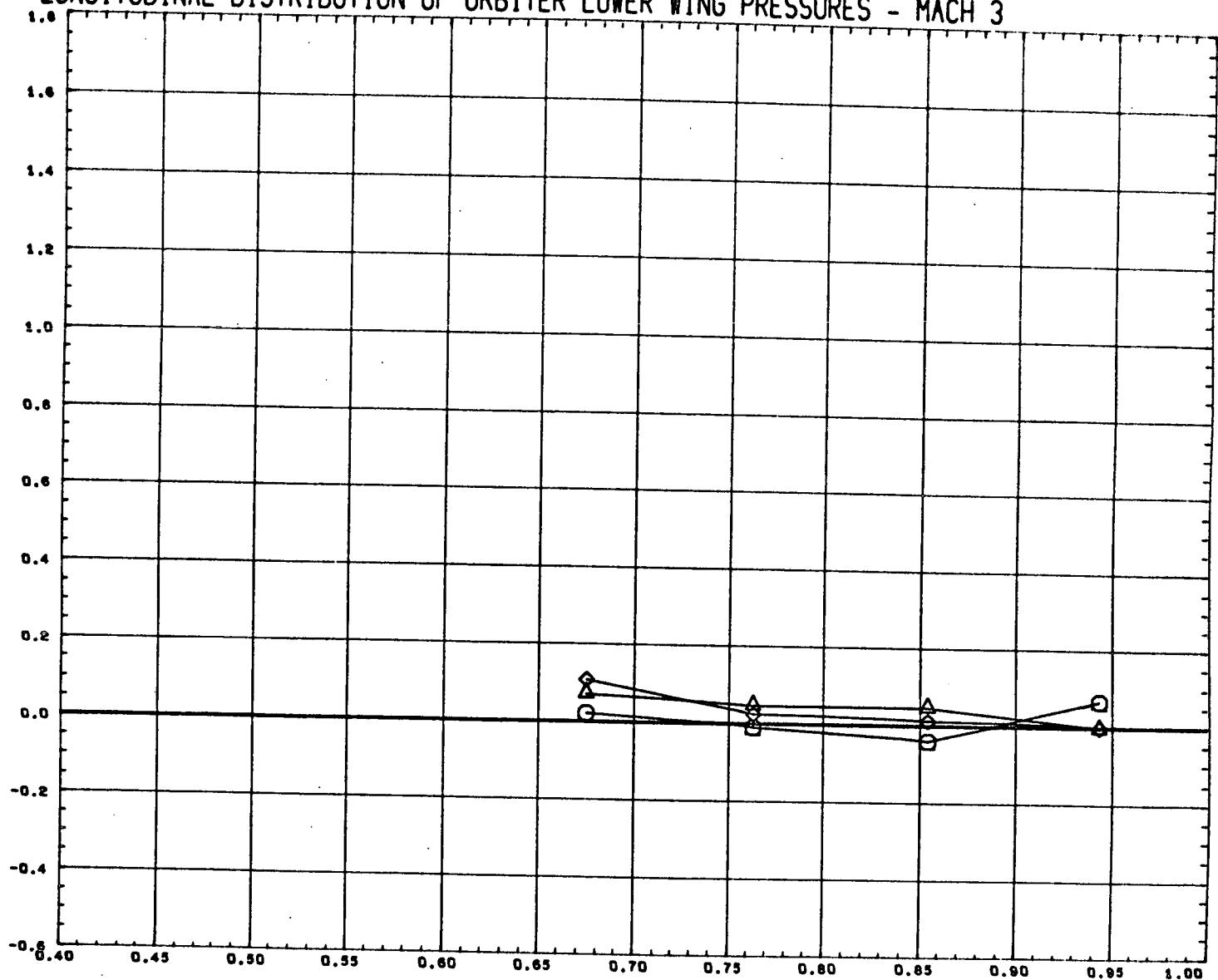
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8313•

PAGE 217

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX Y/B DELTAZ

- - 0.144 0.399 0.151
- △ 0.103 0.225
- ◊ 0.225

LONGITUDINAL POSITION. X/L

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 0.008 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

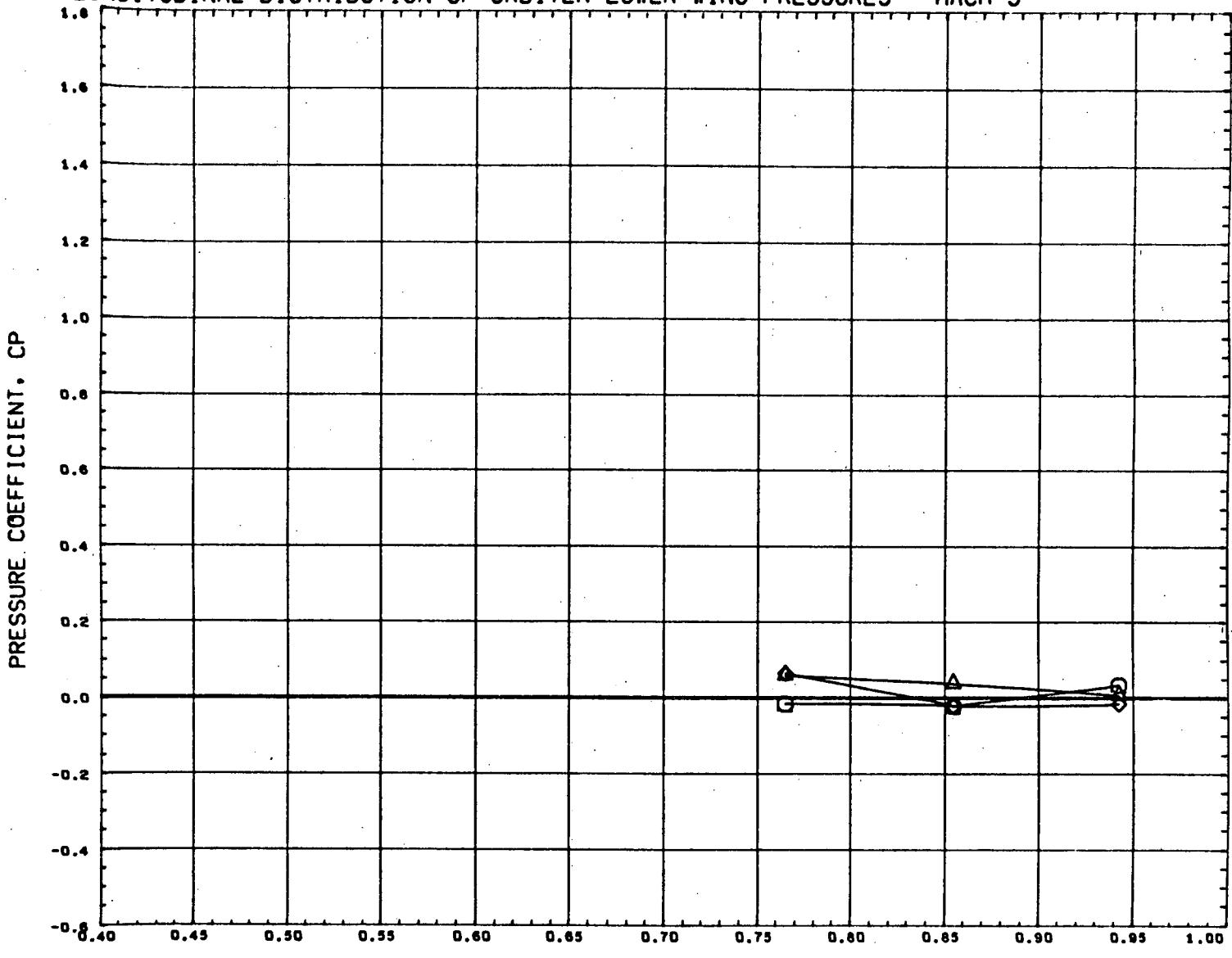
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8313•

PAGE 218

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|------------|---------|-------|---------|
| Δ | -0.144 | 0.568 | 0.151 |
| \square | 0.103 | | |
| \diamond | 0.225 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 0.008 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

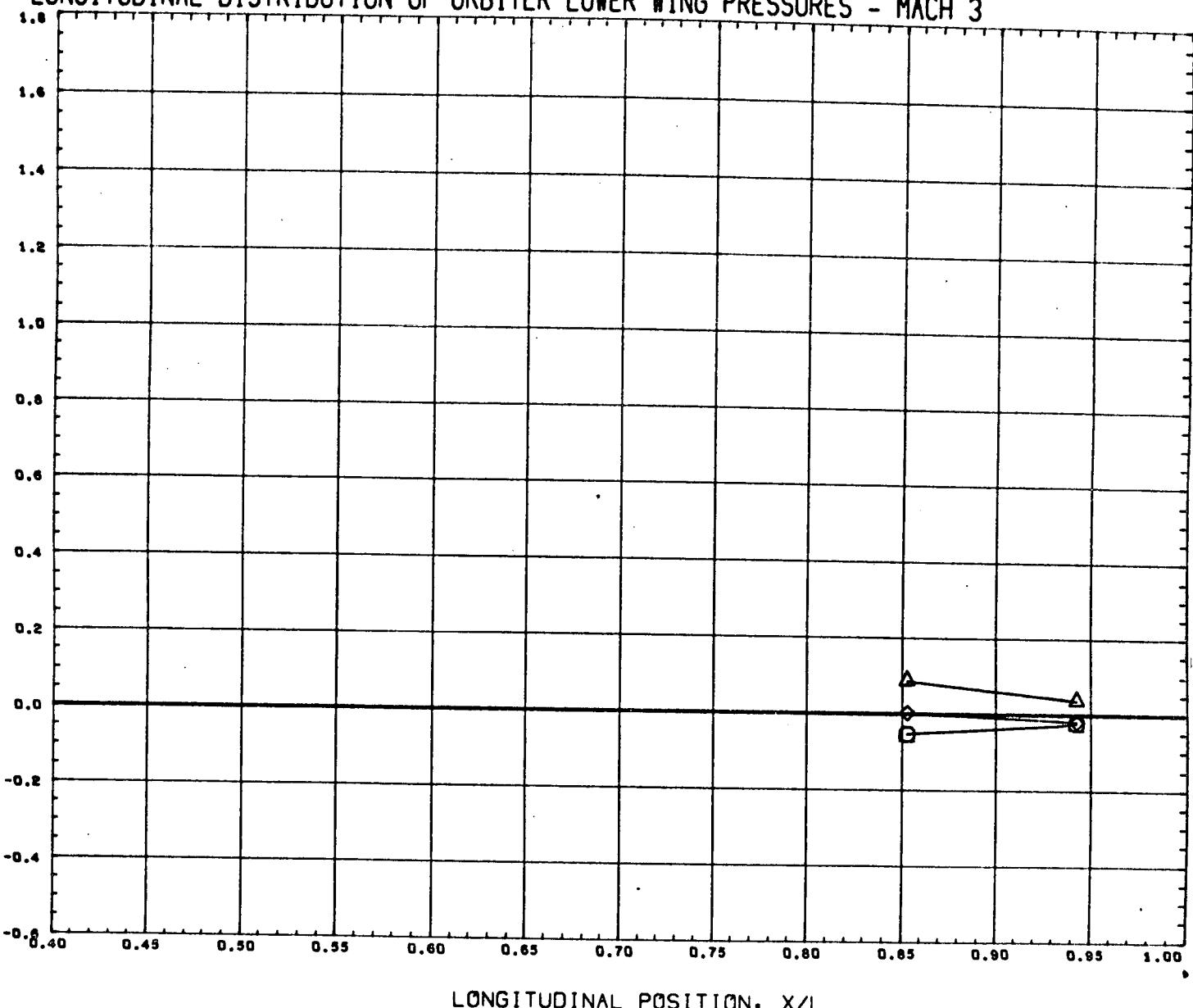
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8313•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.144 | 0.738 | 0.151 |
| △ | 0.103 | | |
| ◊ | 0.225 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 0.008 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

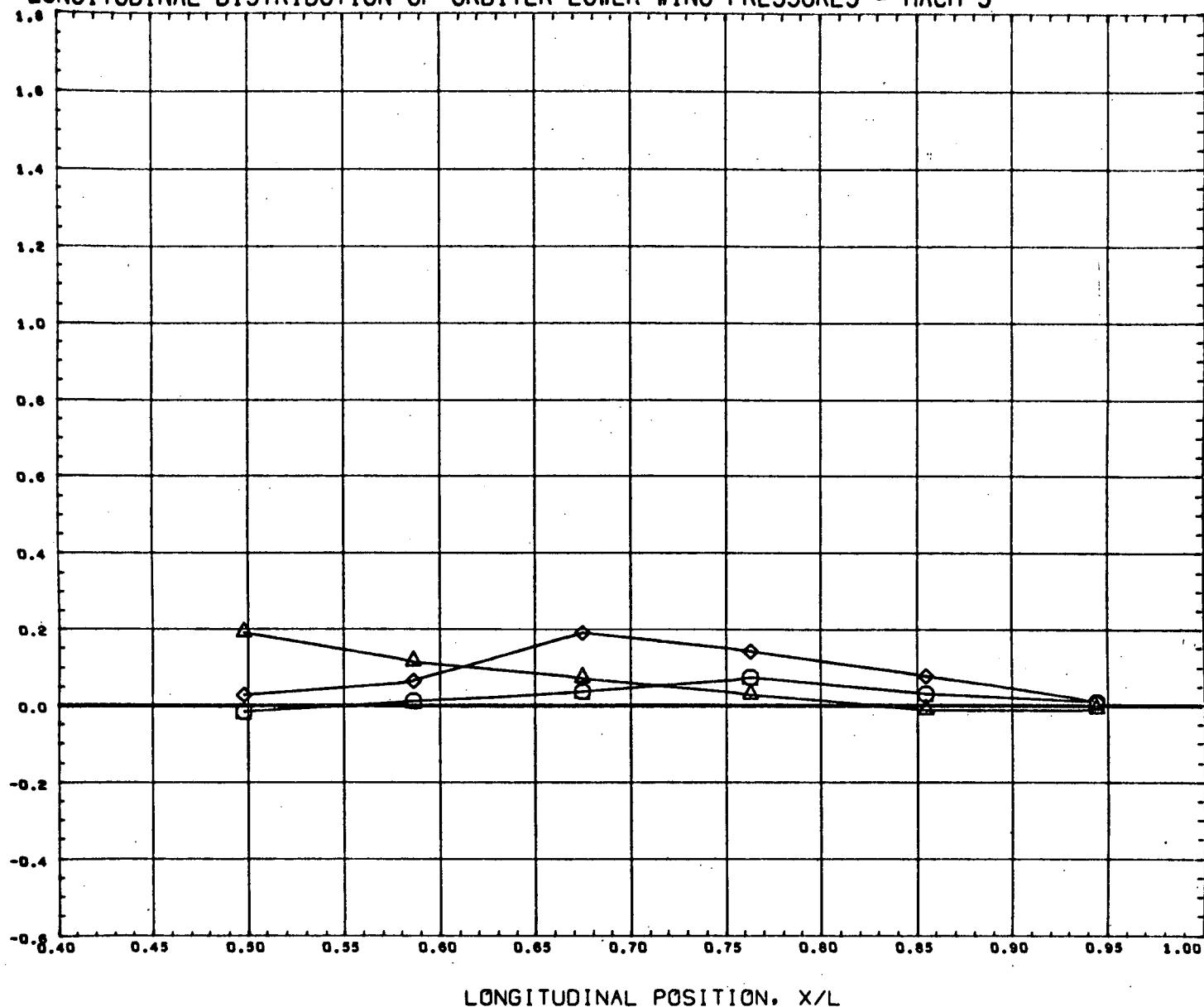
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8313•

PAGE 220

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| - | 0.144 | 0.230 | 0.228 |
| ○ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 0.008 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

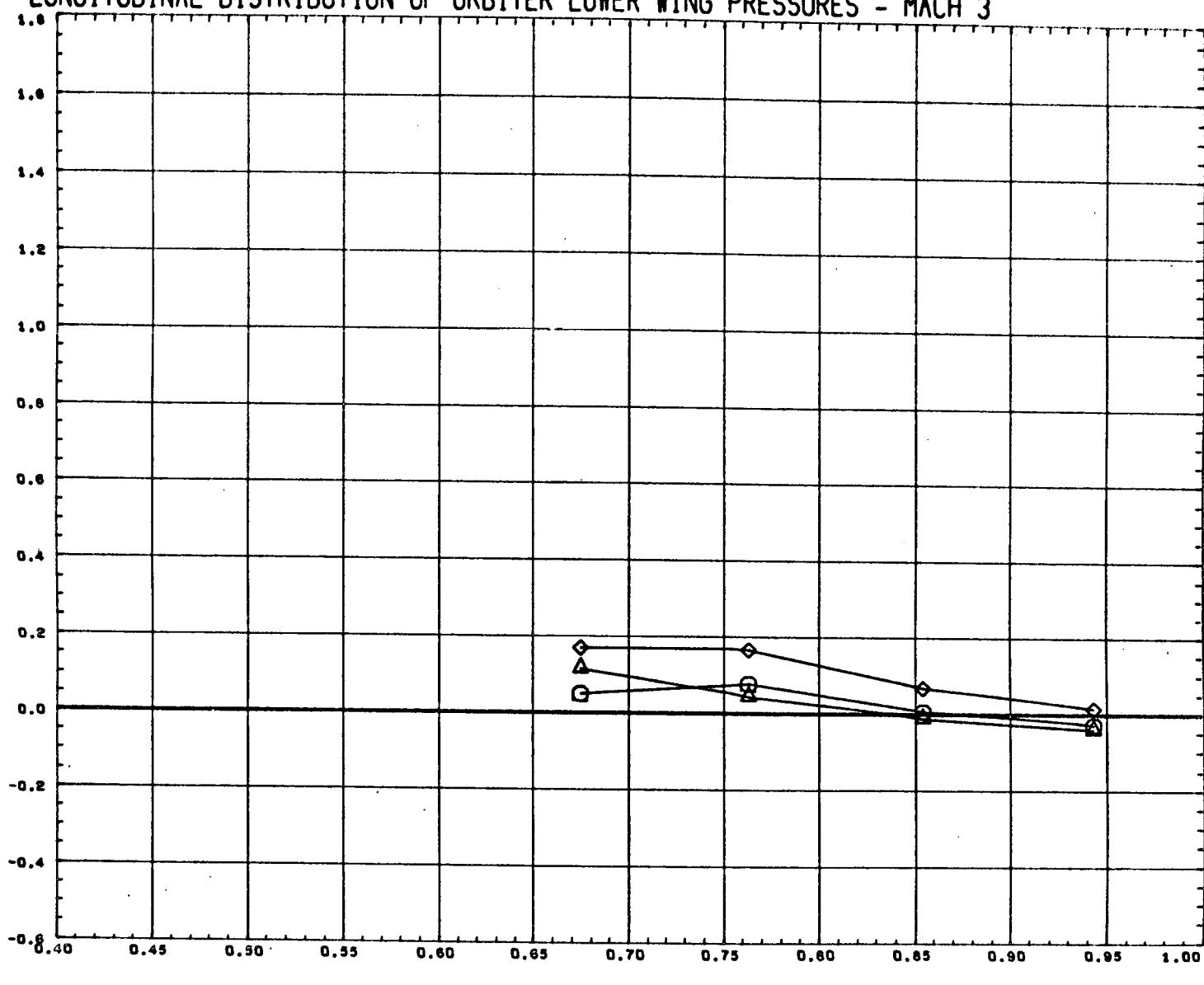
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8313•

PAGE 221

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.144 | 0.399 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
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| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

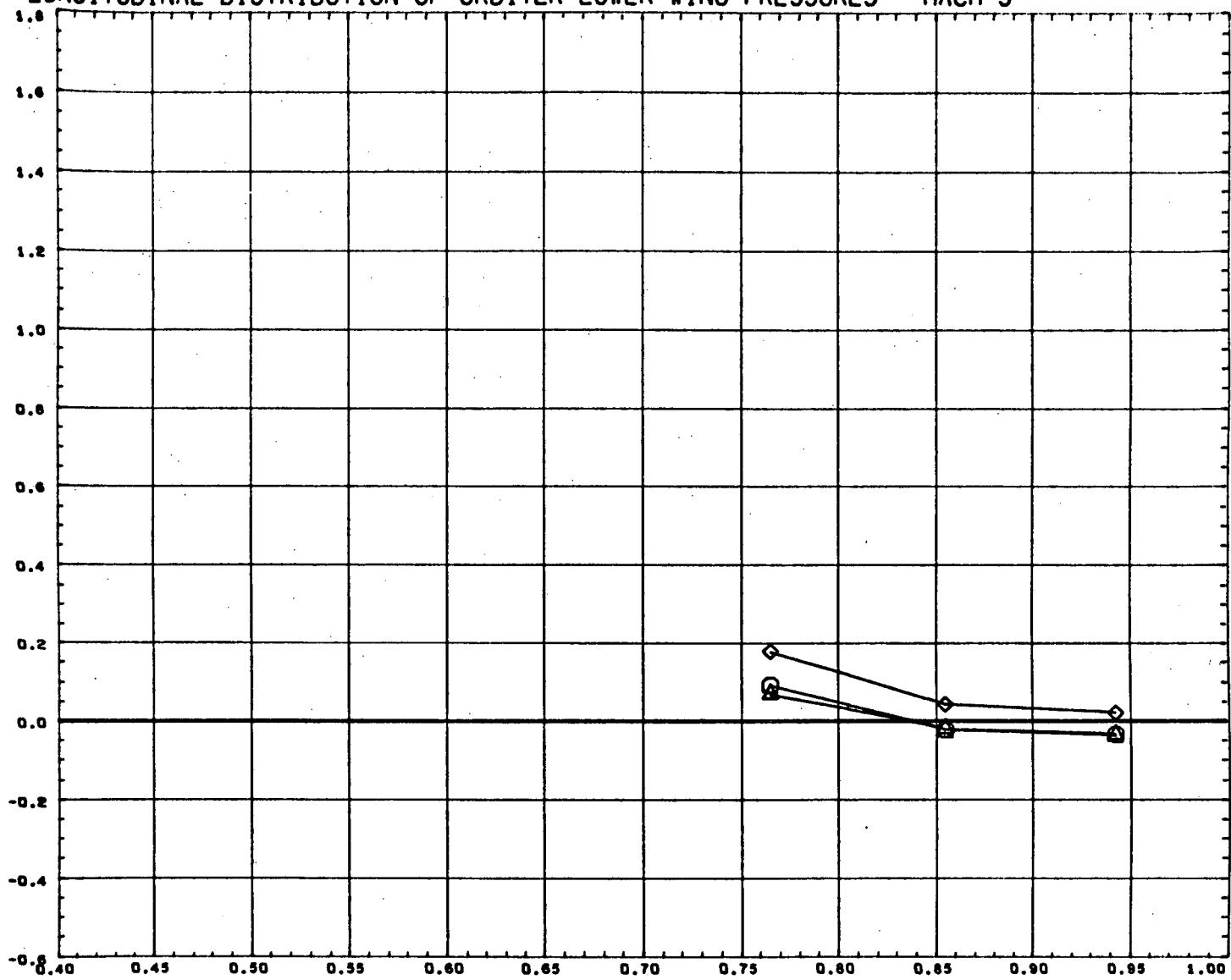
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8313•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.144 | 0.568 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
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| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

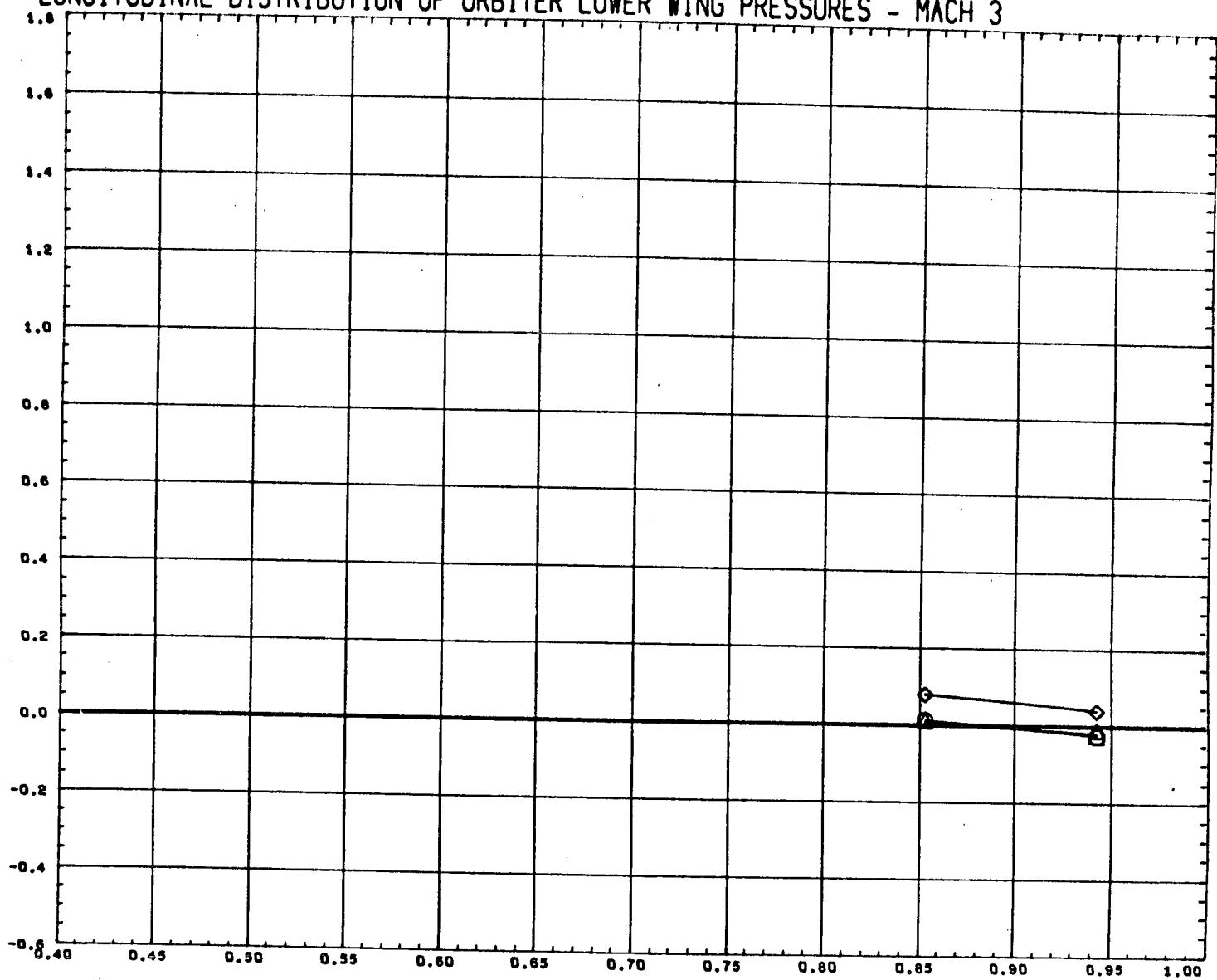
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8313•

PAGE 223

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|------------|---------|-------|--------|
| Δ | - 0.144 | 0.738 | 0.228 |
| \diamond | 0.103 | | |
| | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 0.008 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

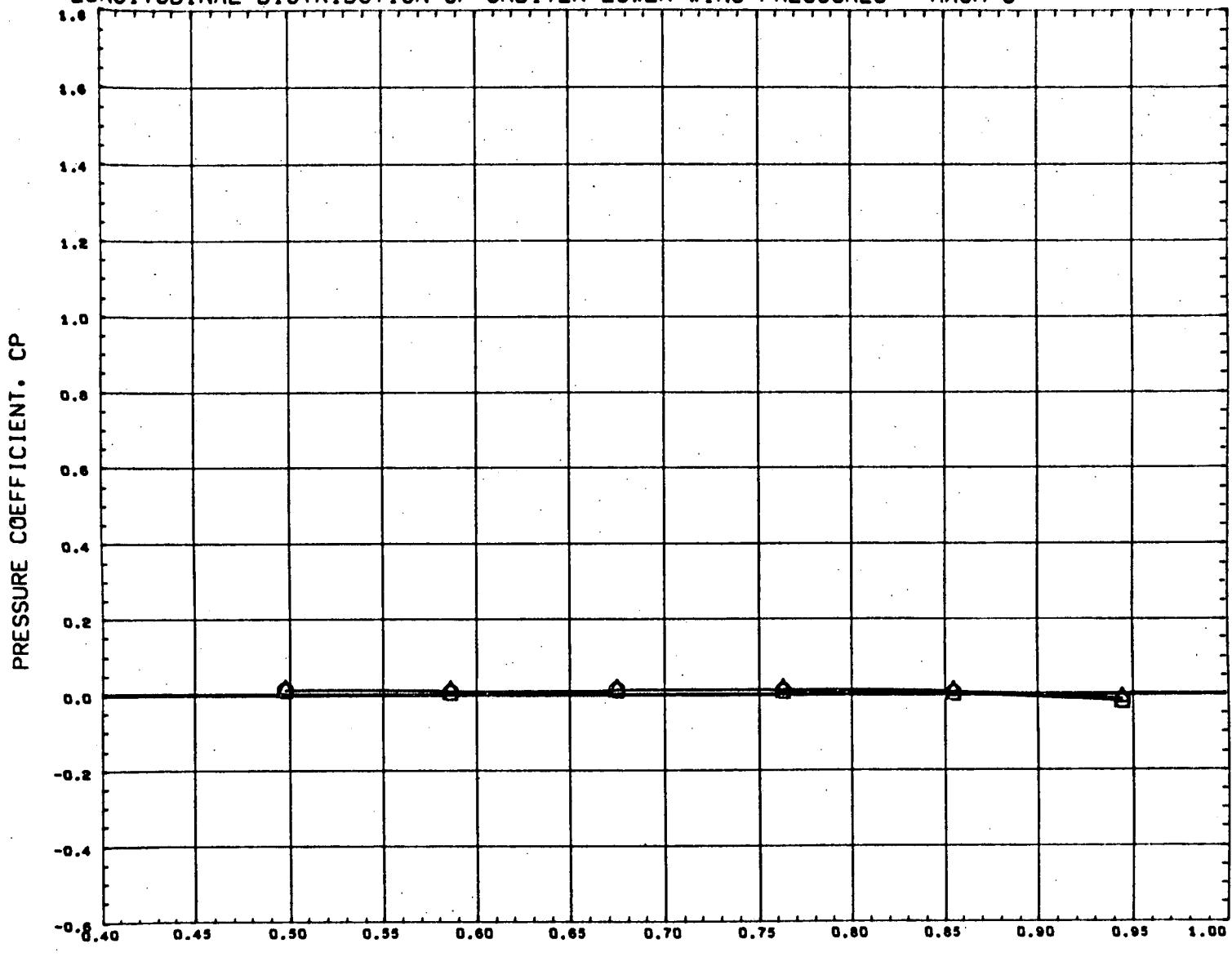
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8313•

PAGE 224

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



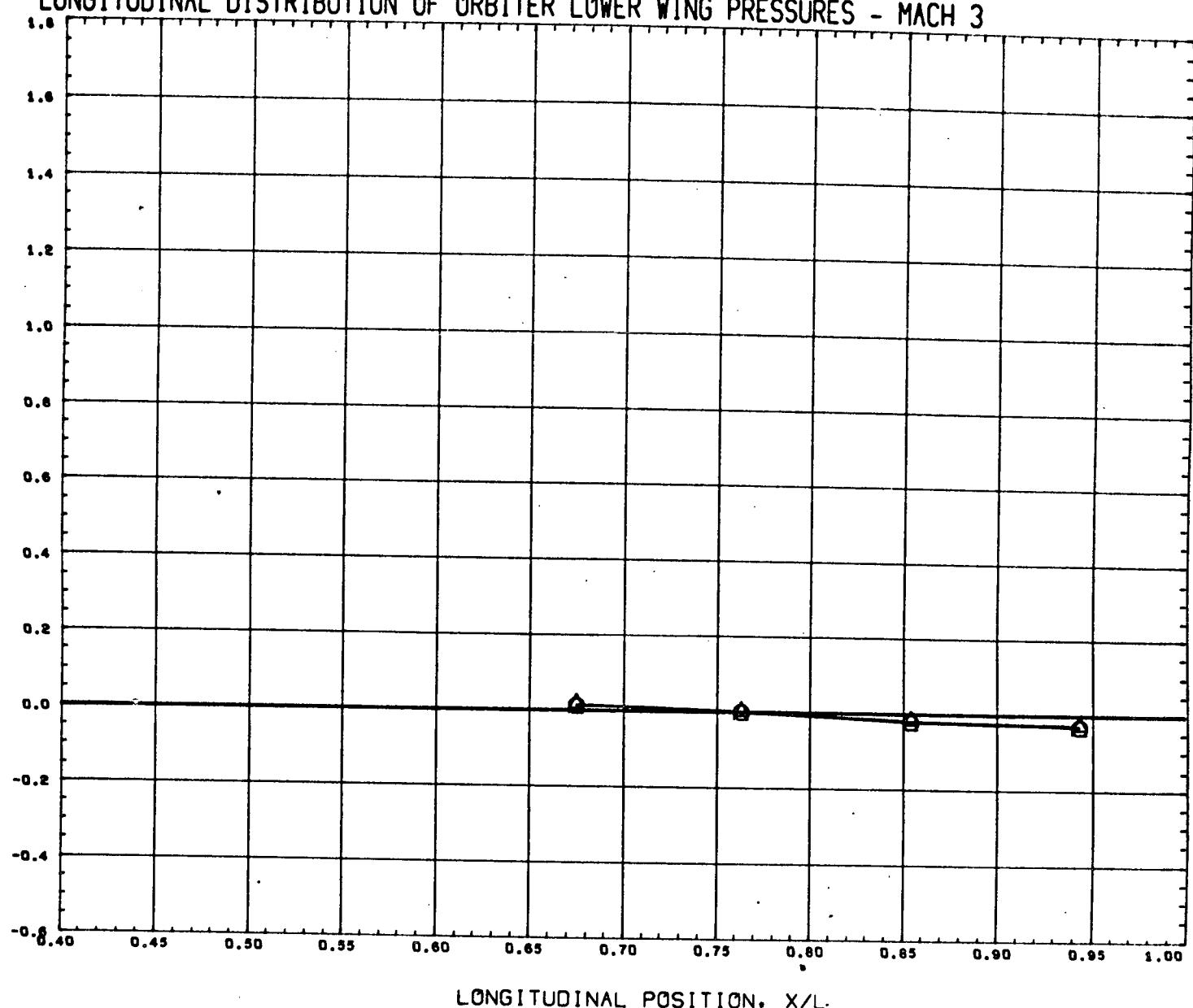
REFERENCE FILE
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8313•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L.

SYMBOL DELTAX Y/B DELTAZ
 O - 0.390 0.399 0.908
 △ 0.479

PARAMETRIC VALUES
 ALPHAB 0.008 MACH 3.000
 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

REFERENCE FILE

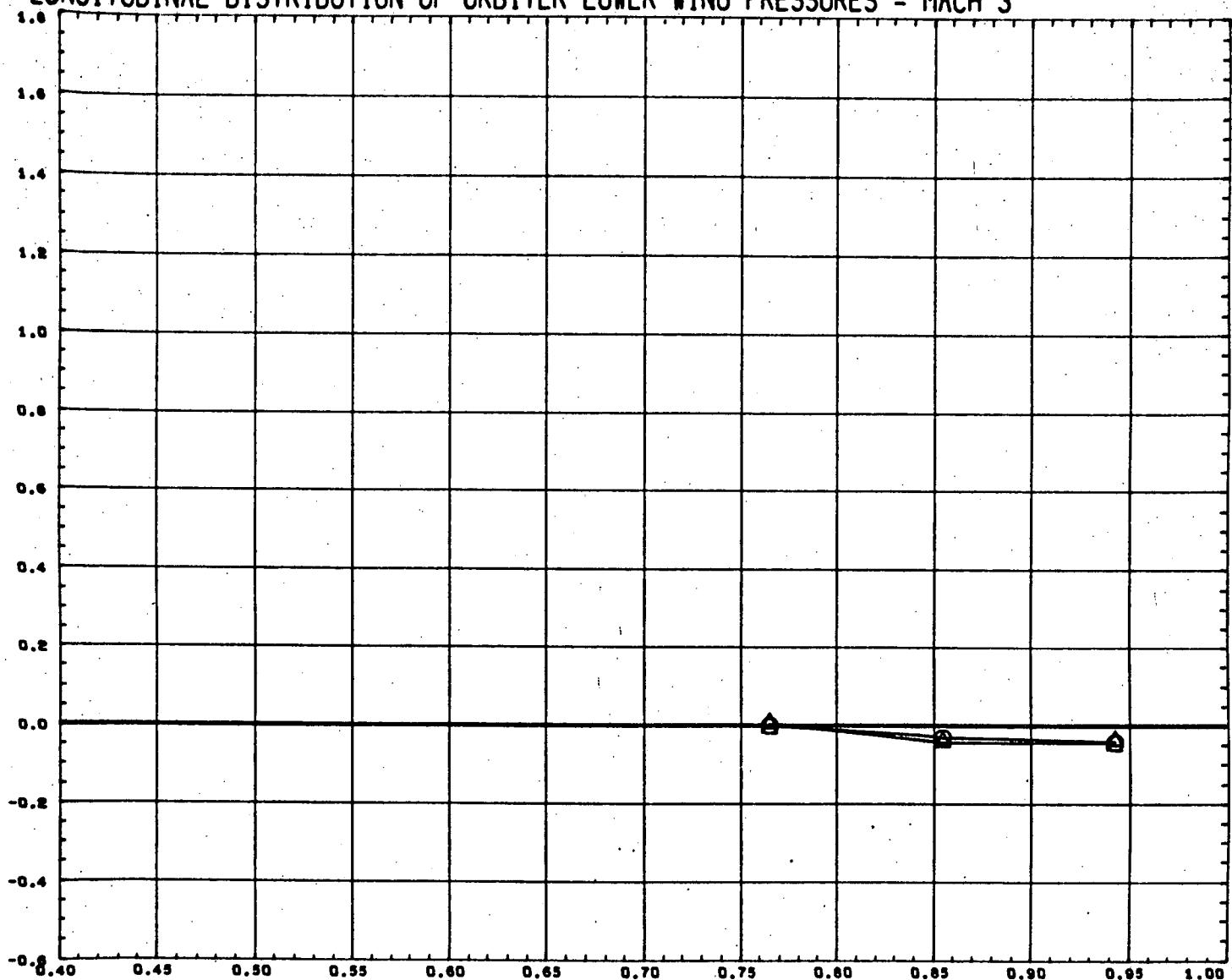
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8313•

PAGE 226

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| O | -0.390 | 0.568 | 0.908 |
| △ | 0.479 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 0.008 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

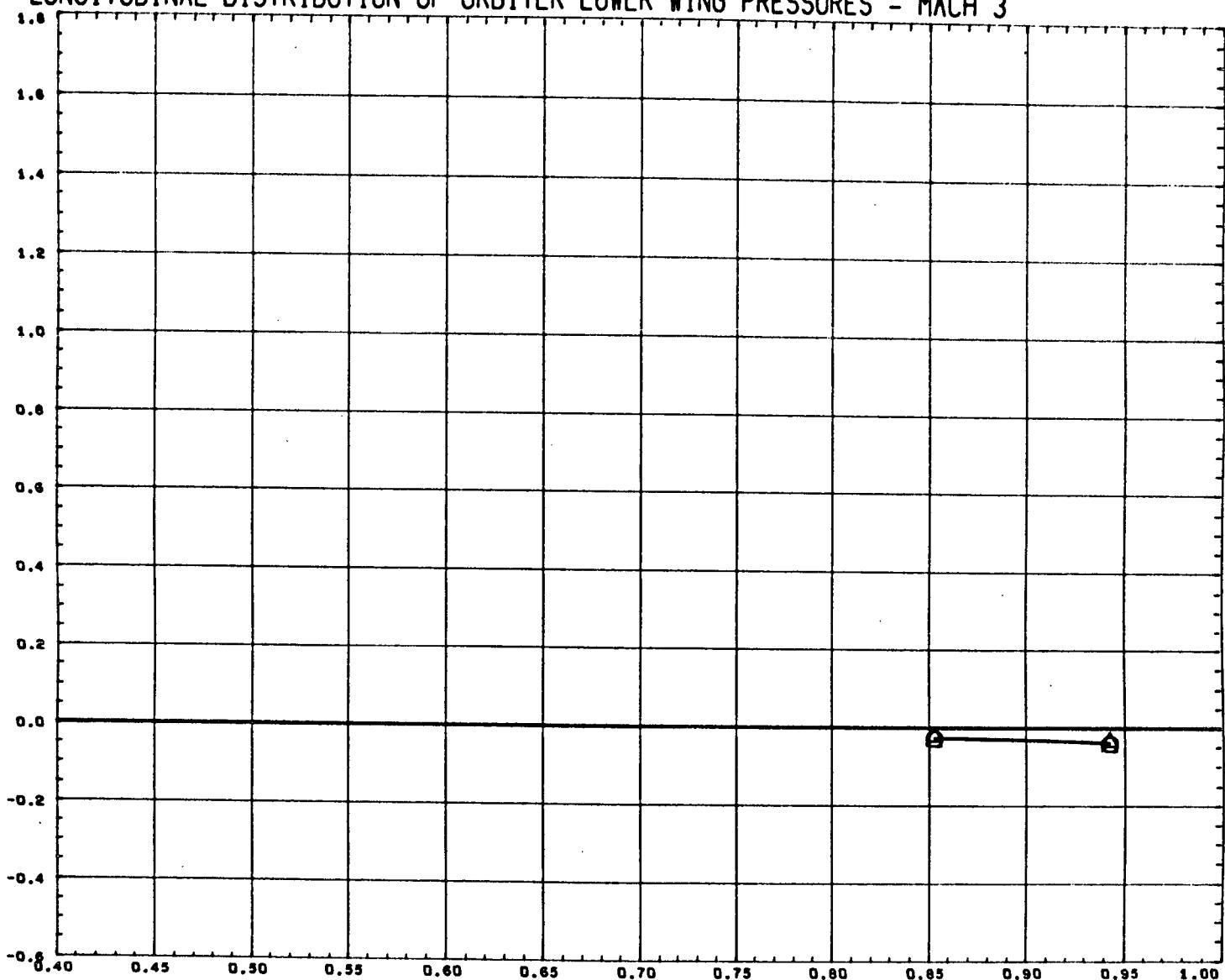
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8313•

PAGE 227

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| O | - 0.390 | 0.738 | 0.908 |
| △ | 0.479 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 0.008 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

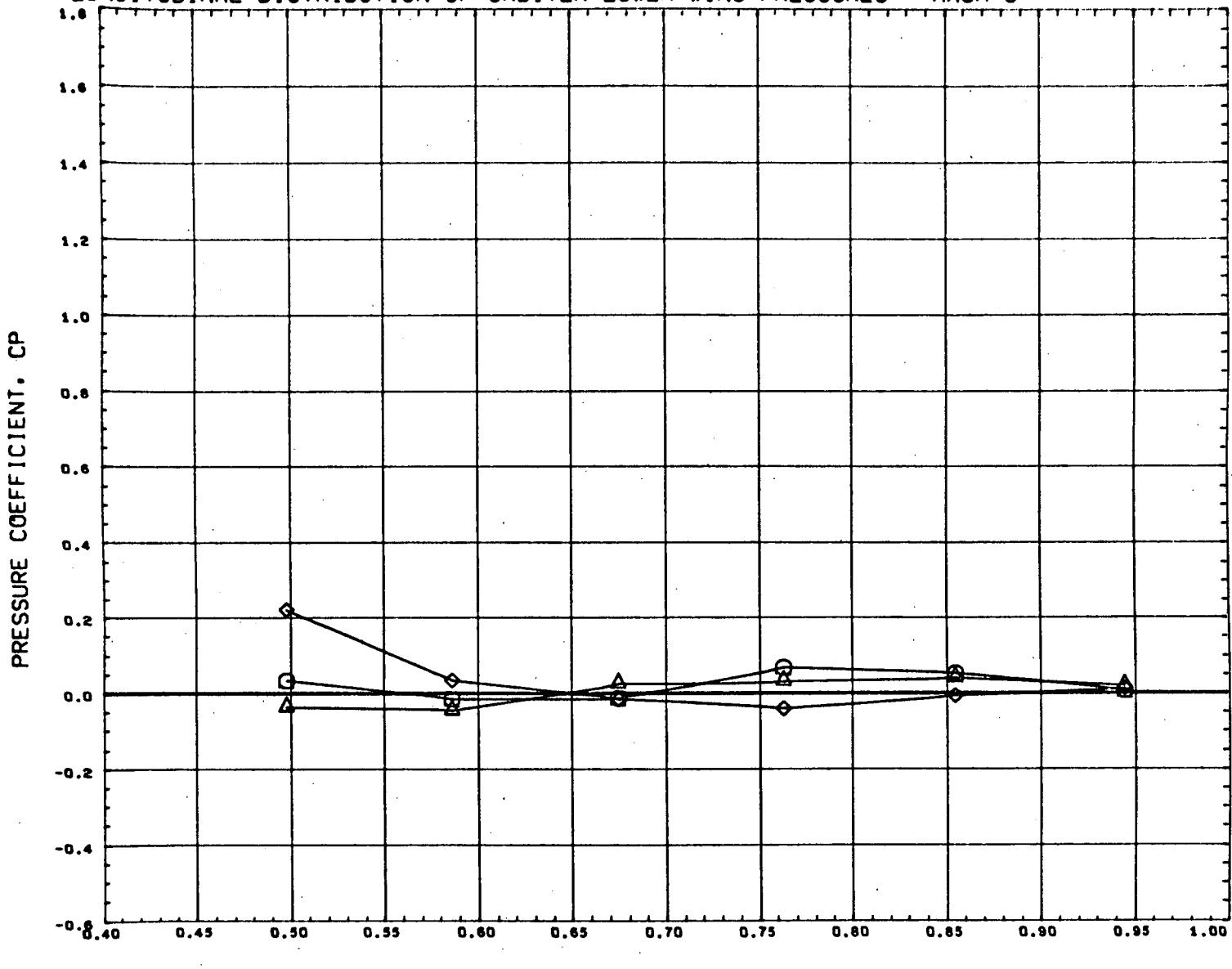
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8313•

PAGE 228

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|------------|---------|-------|-------|
| \circ | - 0.143 | 0.230 | 0.120 |
| \square | 0.103 | | |
| \diamond | 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|---------|
| ALPHAB | 5.017 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

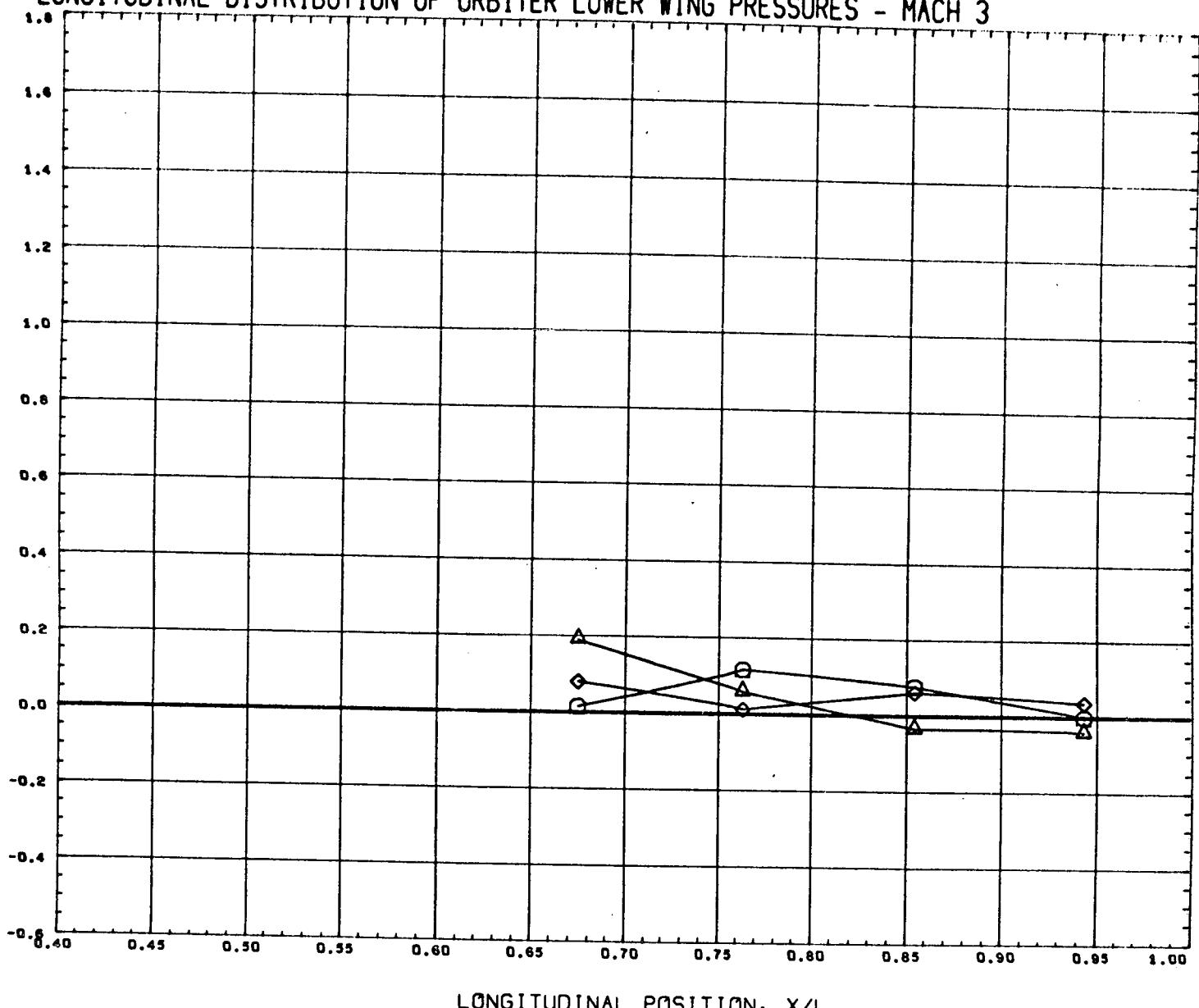
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8314•

PAGE 229

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

△ 0.143 0.399 0.120

○ 0.103 0.226

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 5.017 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

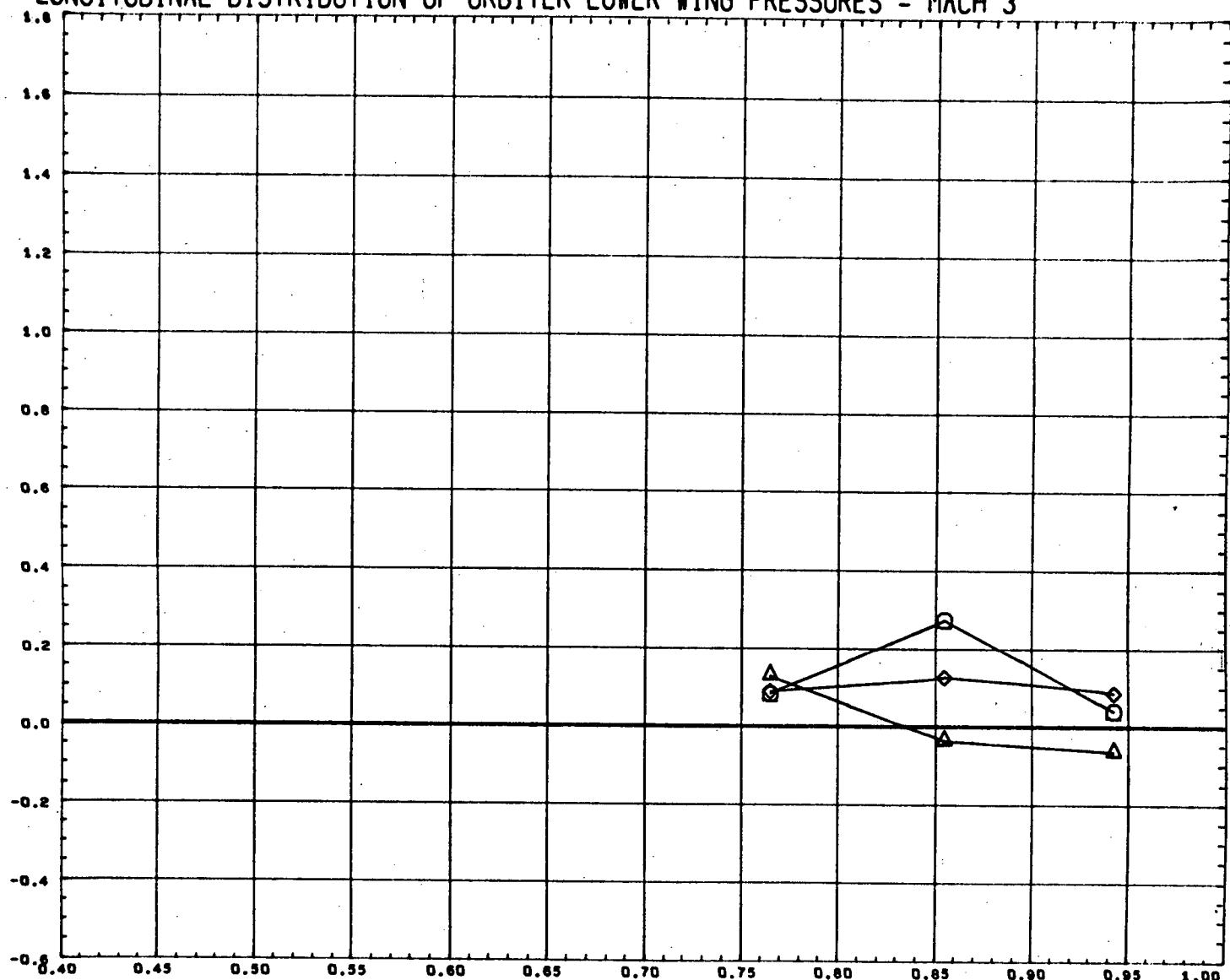
AEDC VAI163 MDAC ORBITER (LOWER WING)

•HT8314•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 0.568 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

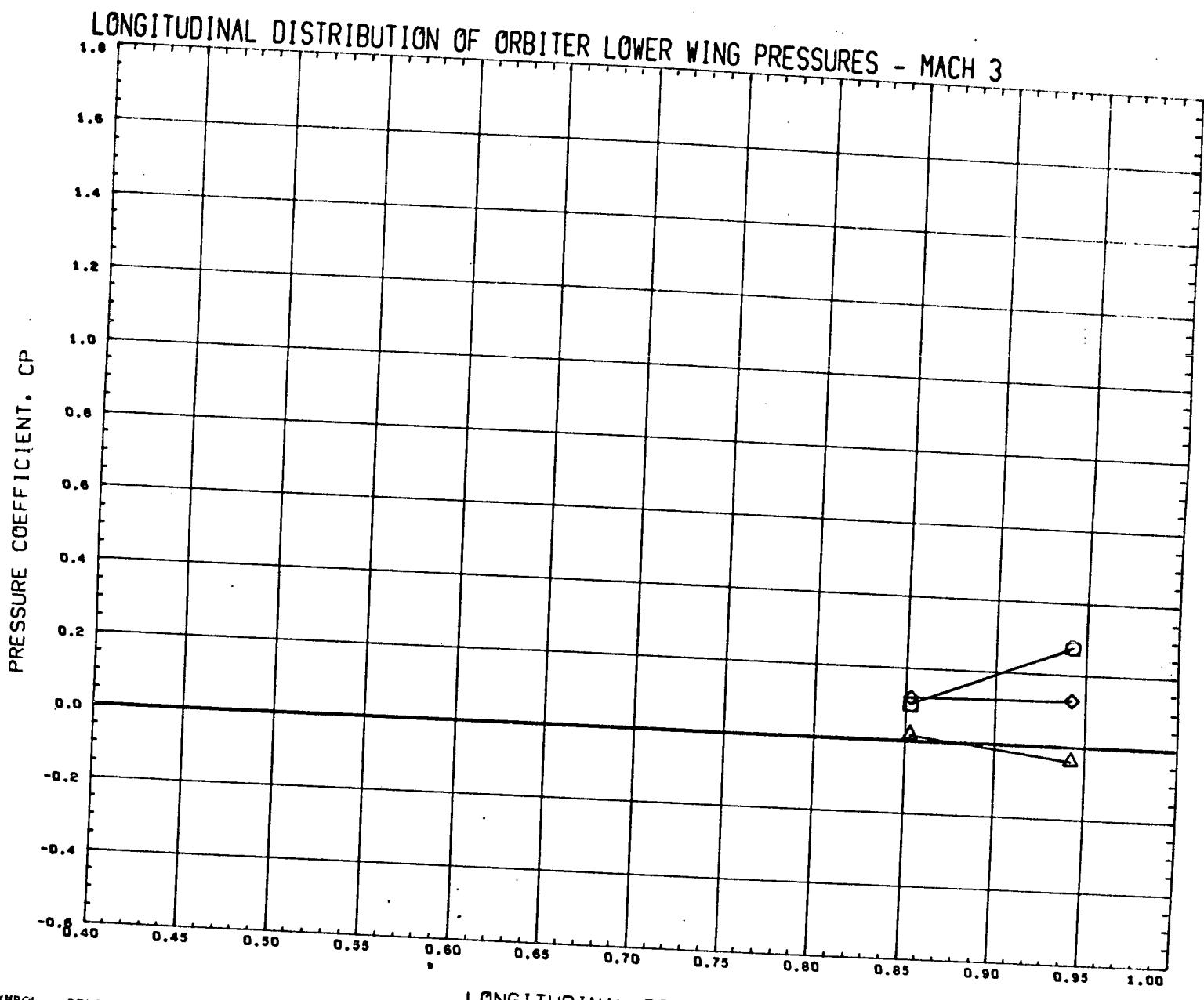
| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 5.017 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8314•

PAGE 231



PARAMETRIC VALUES
 ALPHAB 5.017 MACH 3.000
 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

REFERENCE FILE

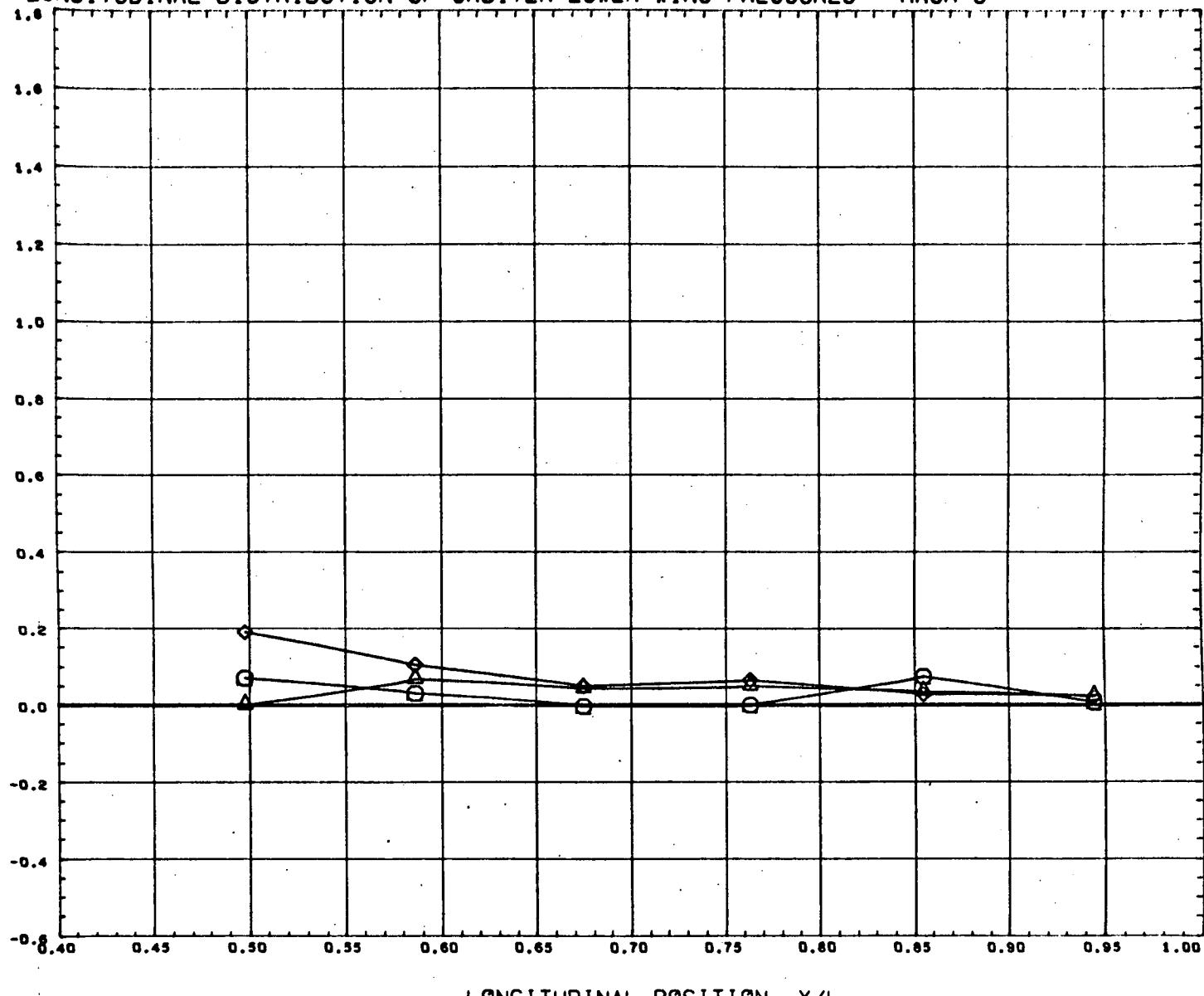
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8314•

PAGE 232

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.144 | 0.230 | 0.151 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

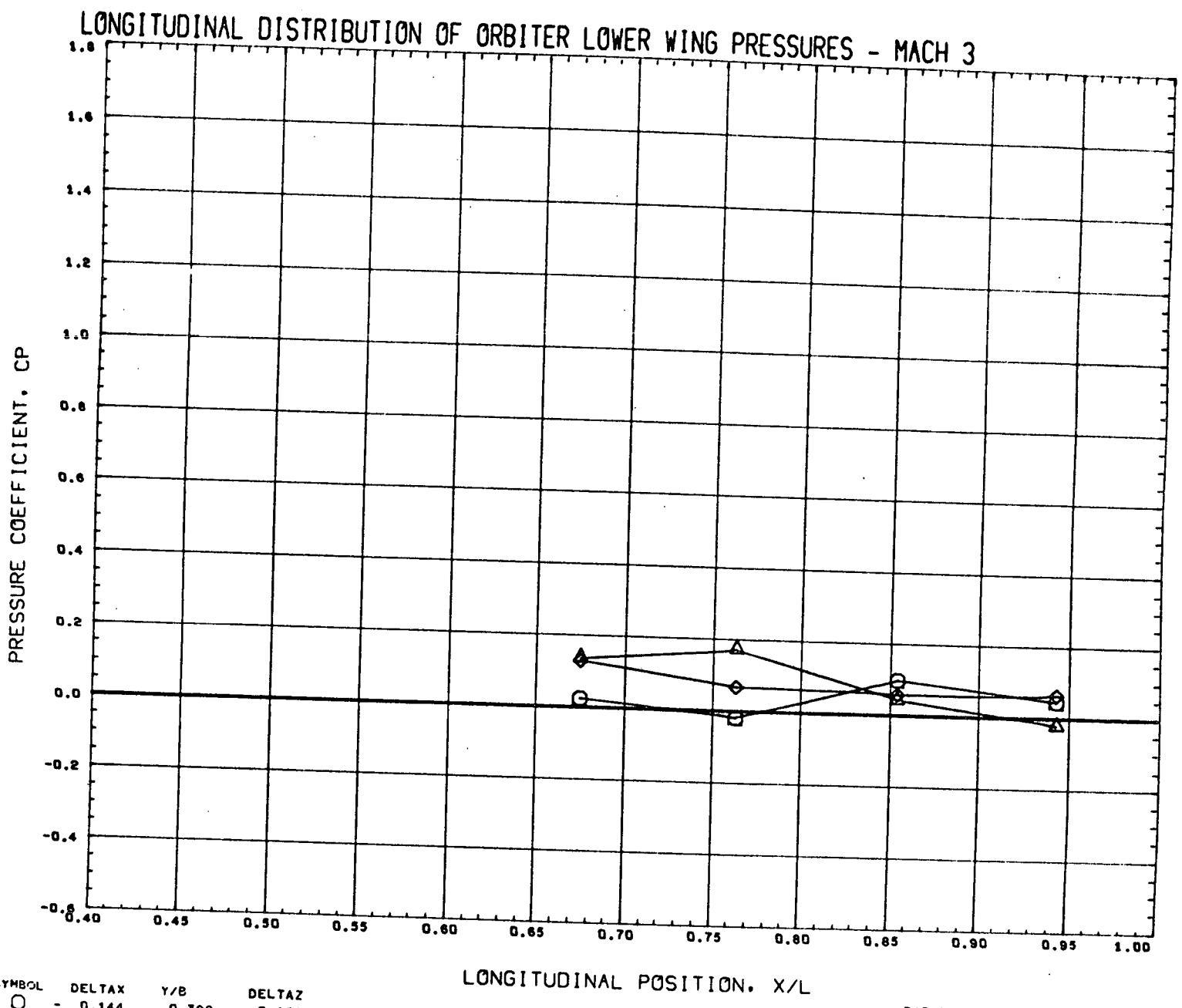
| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 5.017 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8314•

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| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 5.017 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

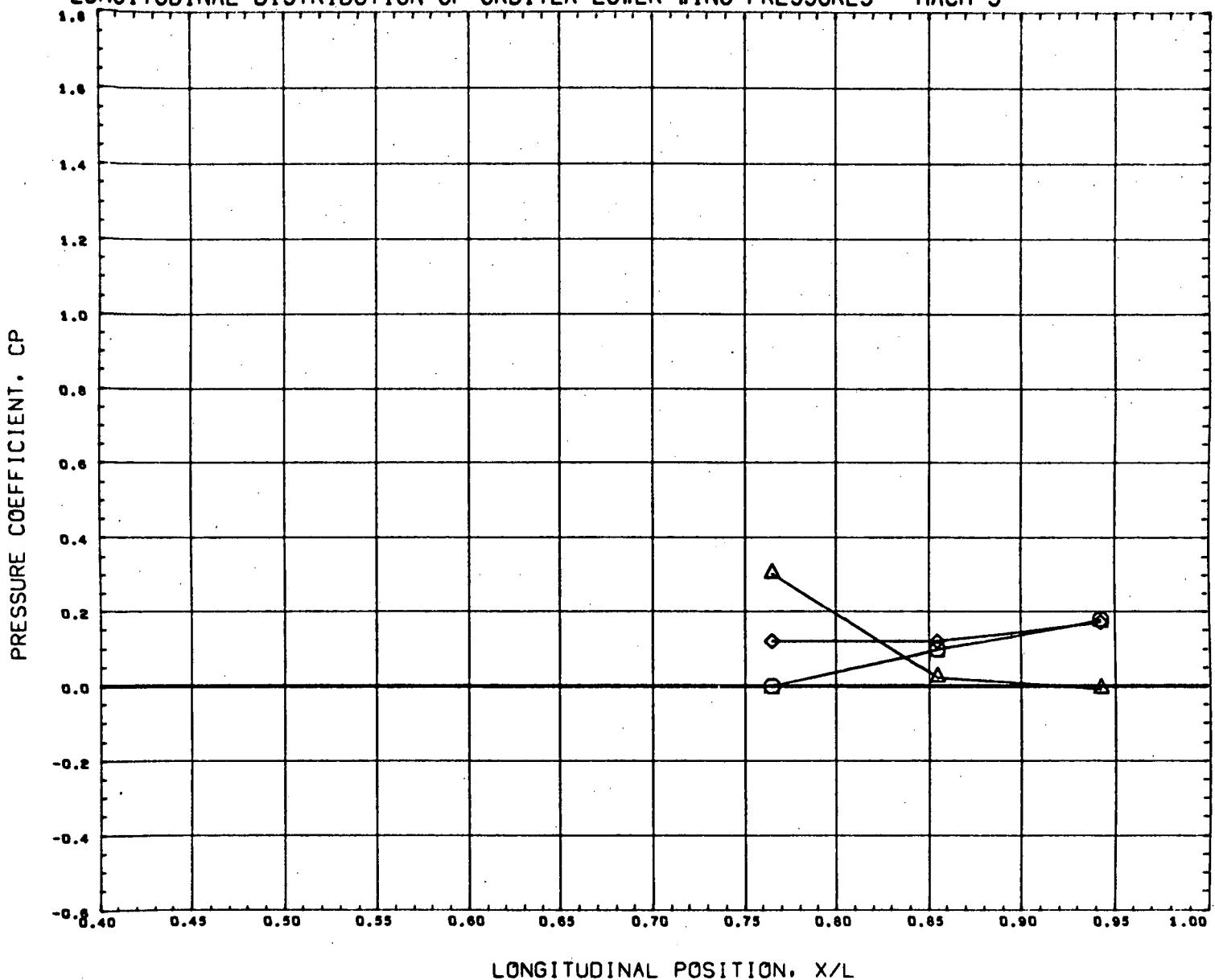
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8314•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.144 | 0.568 | 0.151 |
| △ | - 0.103 | | |
| ◊ | 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|---------|
| ALPHAB | 5.017 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

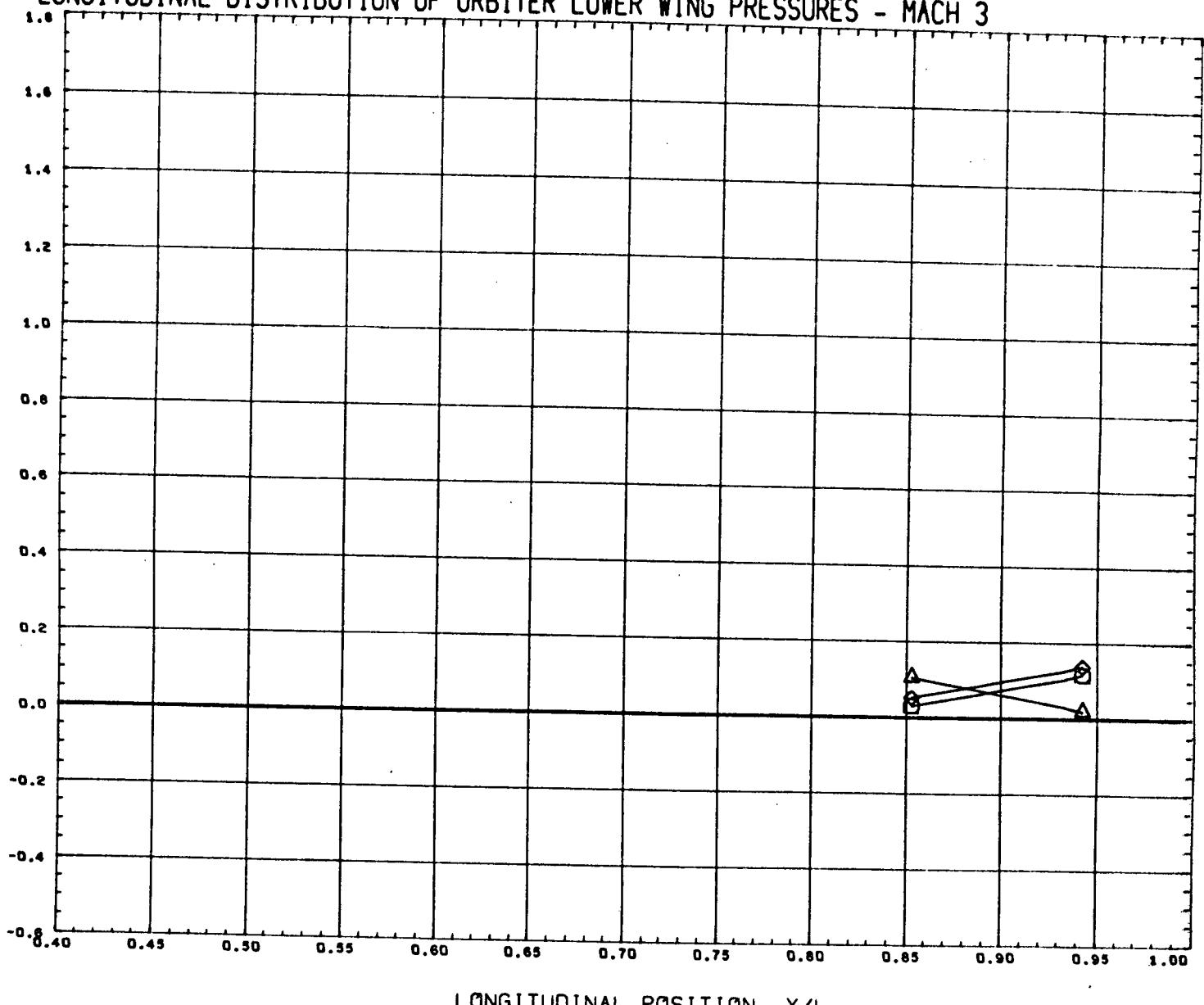
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8314•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

△ 0.144 0.738 0.151

○ 0.103 0.103 0.151

◊ 0.226 0.226 0.226

LONGITUDINAL POSITION, X/L

PARAMETRIC VALUES

| ALPHAB | MACH | 3.000 |
|--------|--------|---------|
| ALPHAI | ORBPOW | 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

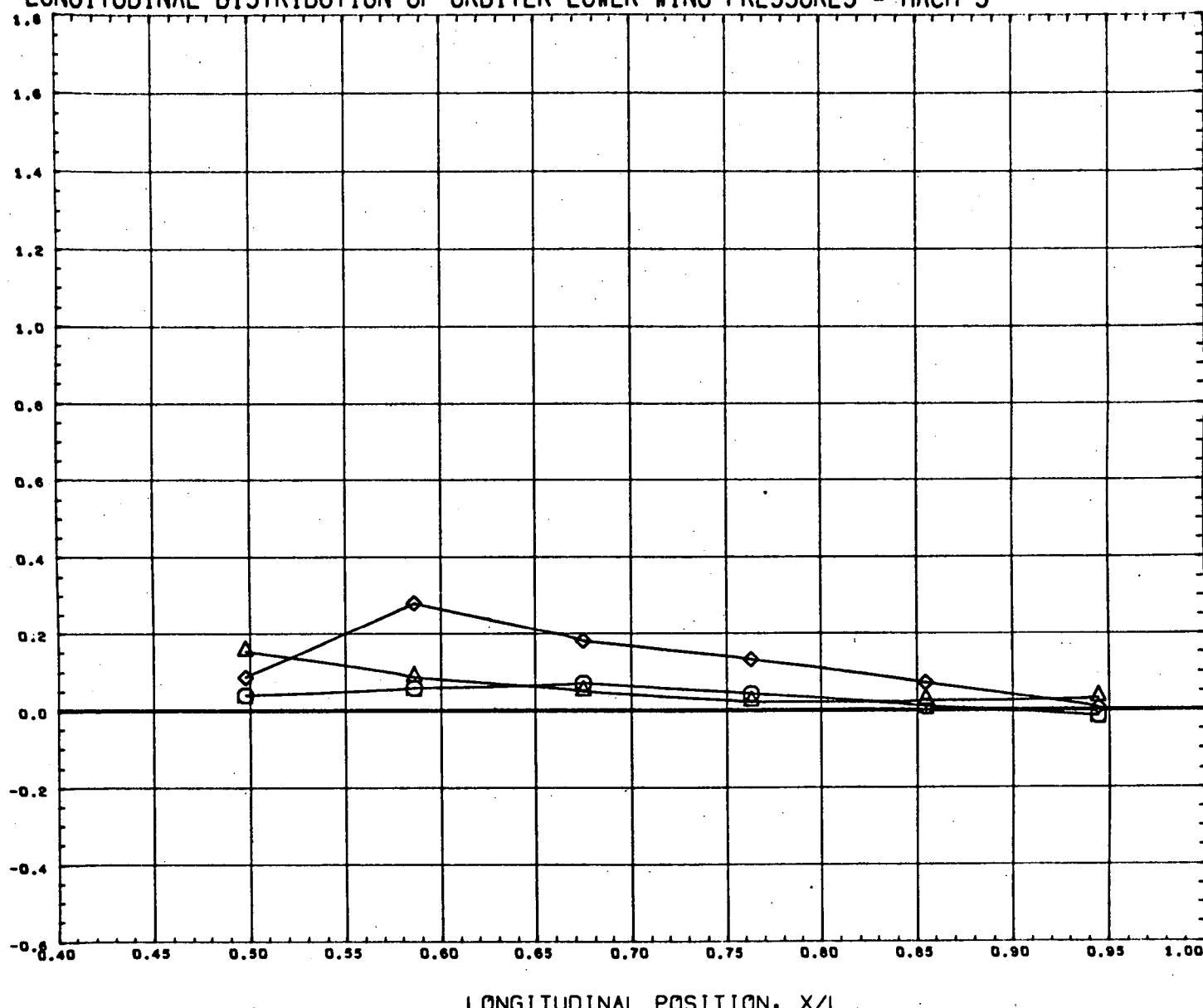
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8314•

PAGE 236

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.144 | 0.230 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 5.017 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

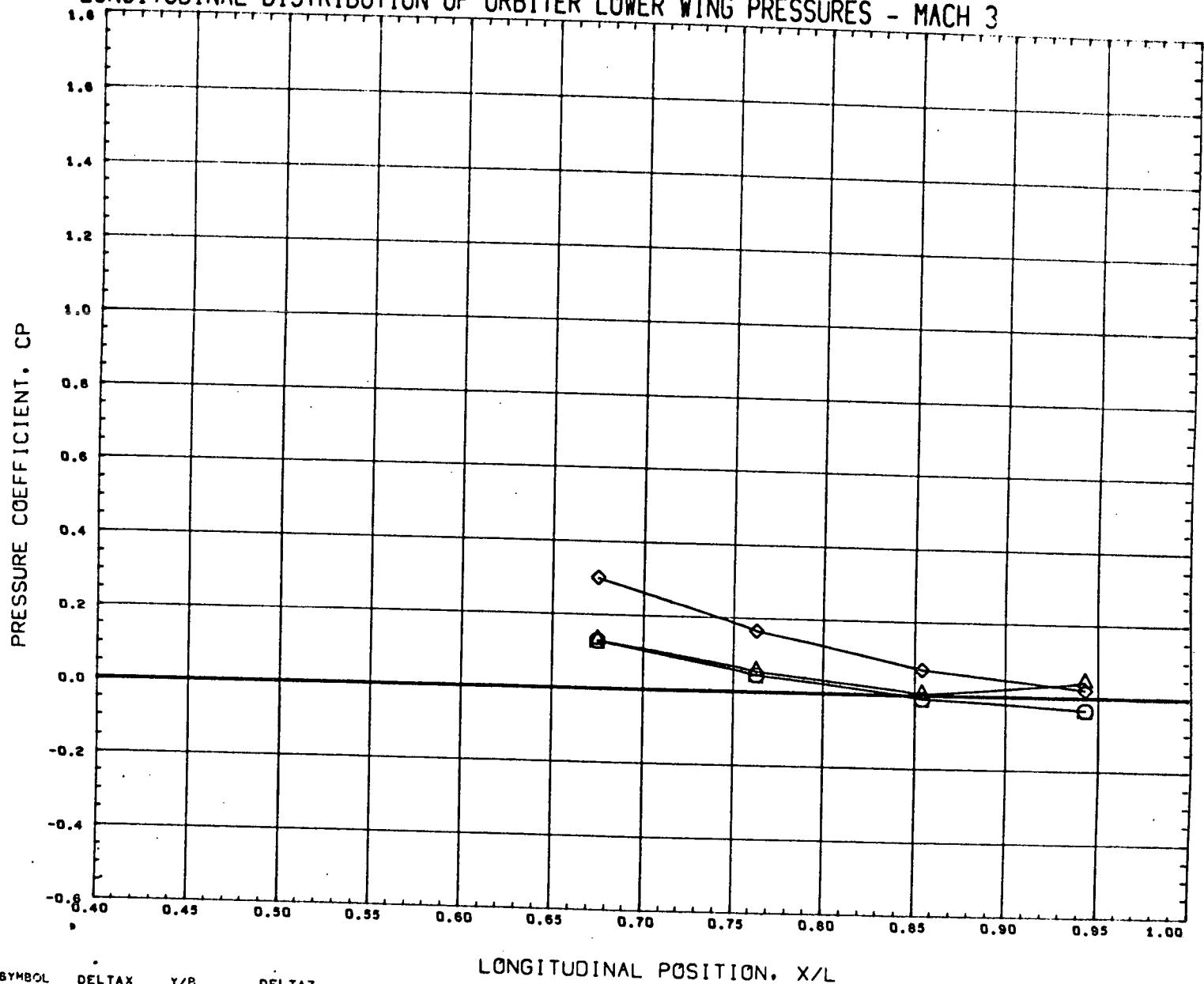
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8314•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|-------------|---------|-------|-------|
| \triangle | - 0.144 | 0.399 | 0.226 |
| \square | 0.103 | | |
| \diamond | 0.227 | | |

LONGITUDINAL POSITION. X/L

| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|---------|
| ALPHAB | 5.017 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

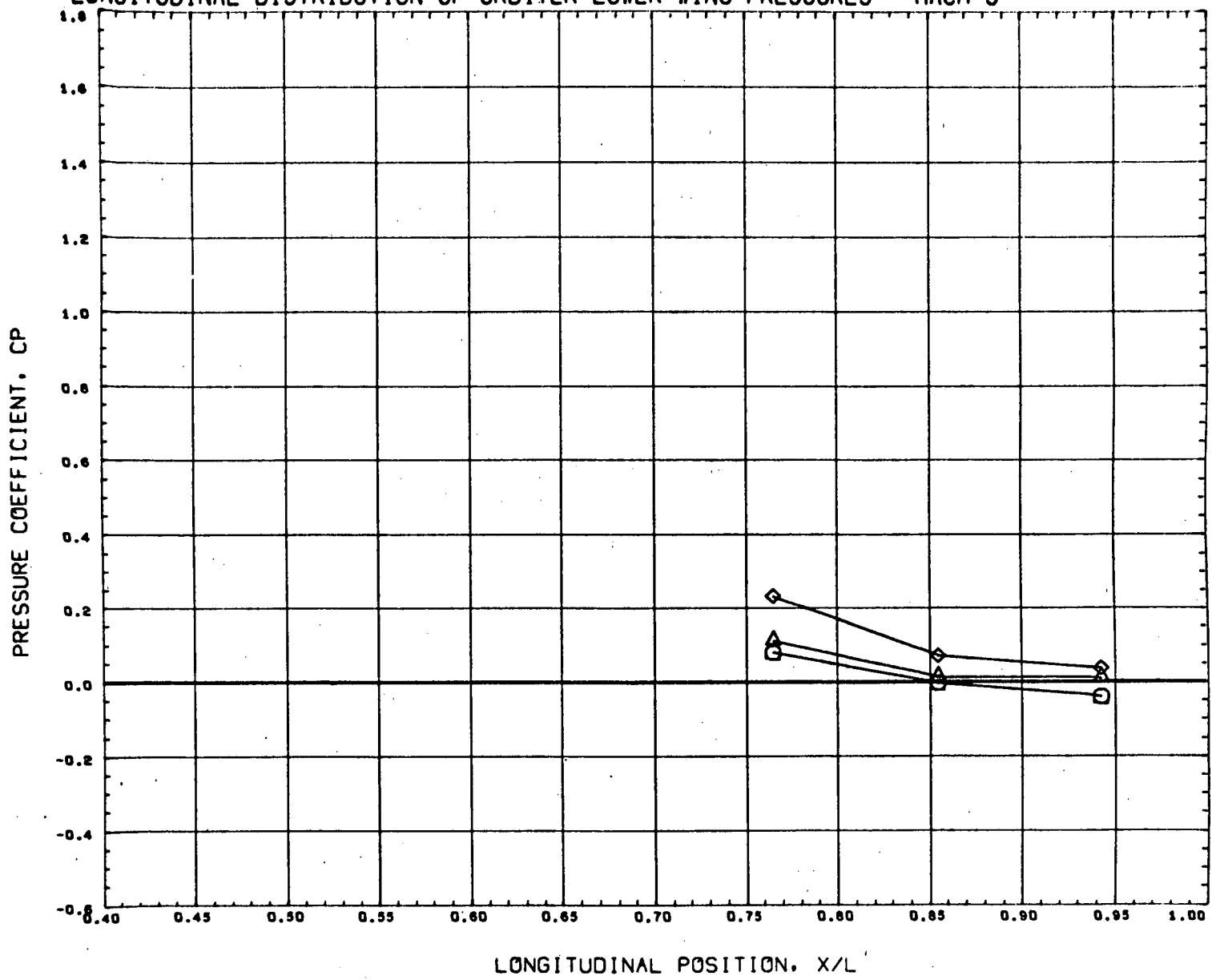
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8314•

PAGE 238

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 □ - 0.144 0.566 0.228
 △ - 0.103 0.566 0.228
 ◇ - 0.227 0.566 0.228

PARAMETRIC VALUES
 ALPHAB 5.017 MACH 3.000
 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

REFERENCE FILE

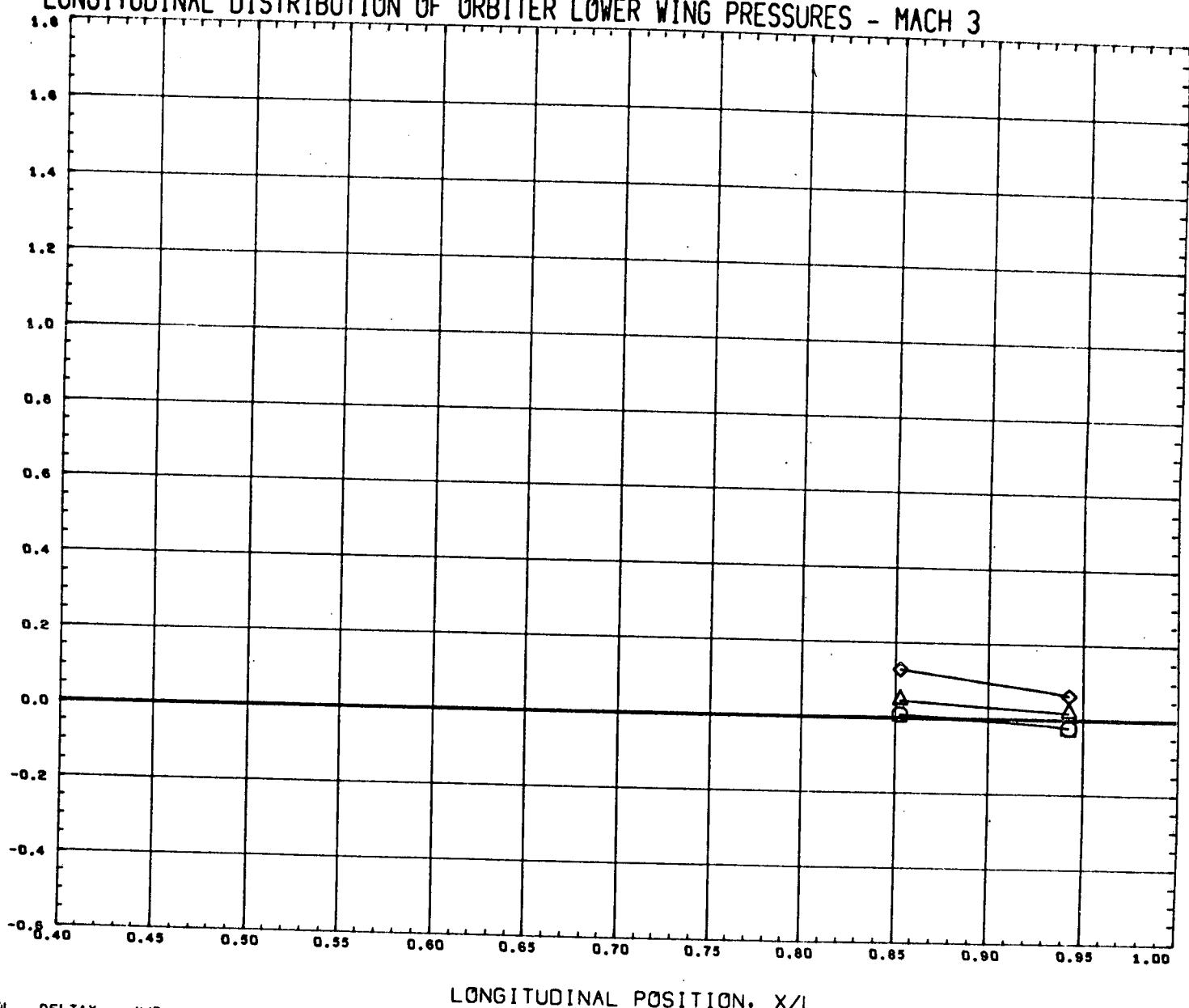
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8314•

PAGE 239

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

\square - 0.144 0.738 0.226

\triangle 0.103

\diamond 0.227

LONGITUDINAL POSITION, X/L

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|---------|
| ALPHAB | 5.017 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

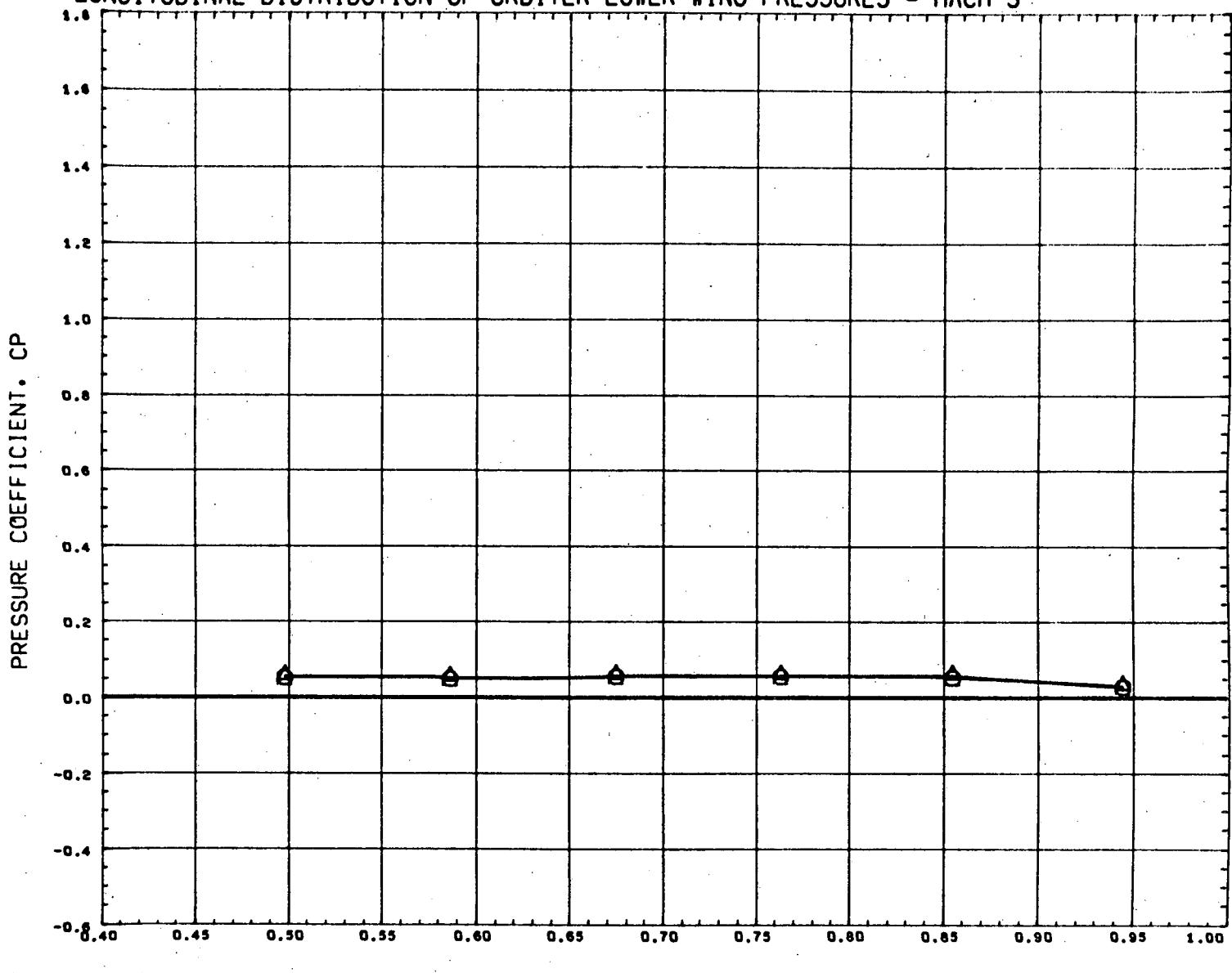
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8314•

PAGE 240

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



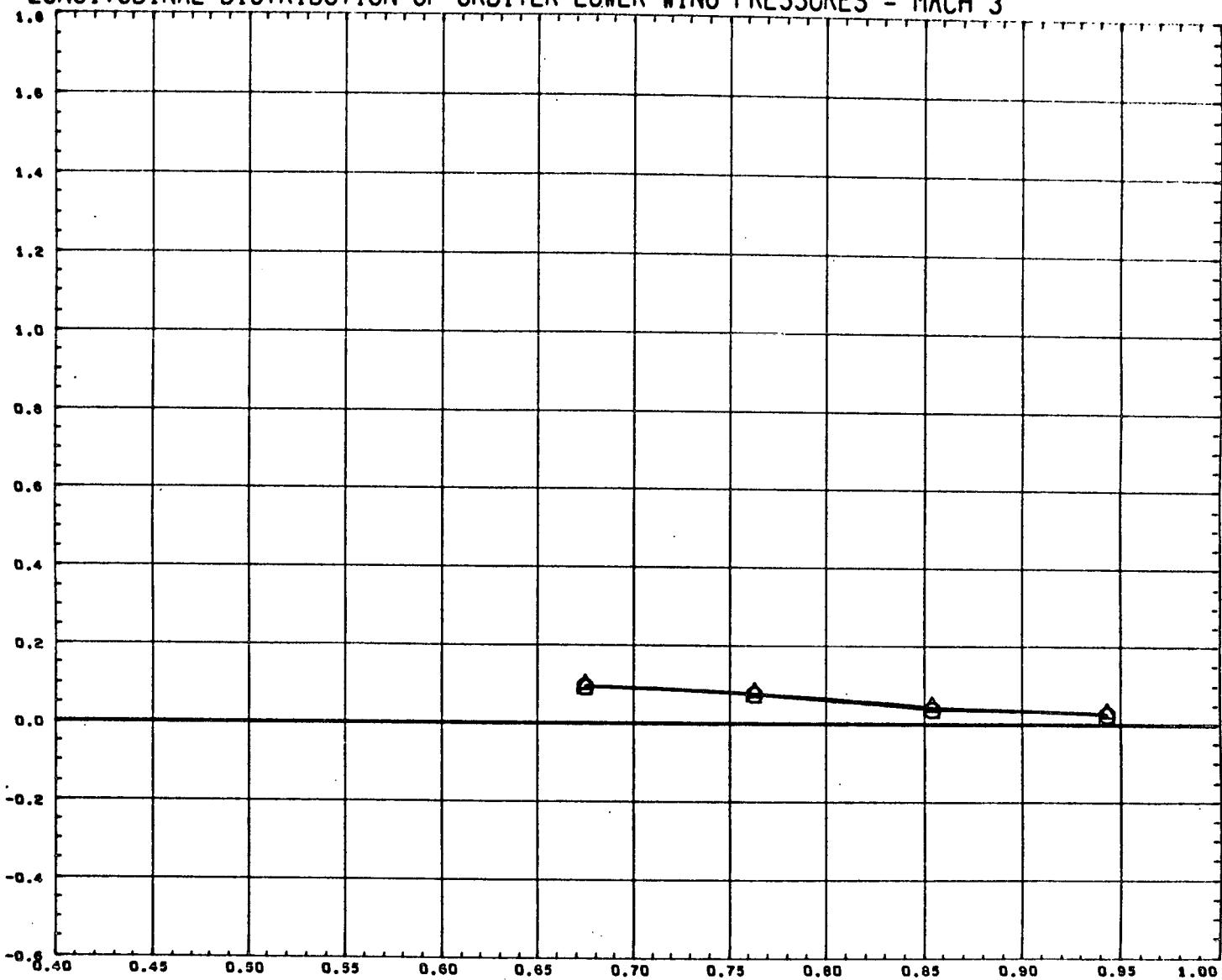
REFERENCE FILE
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8314•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.390 | 0.399 | 0.908 |
| △ | 0.521 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 5.017 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

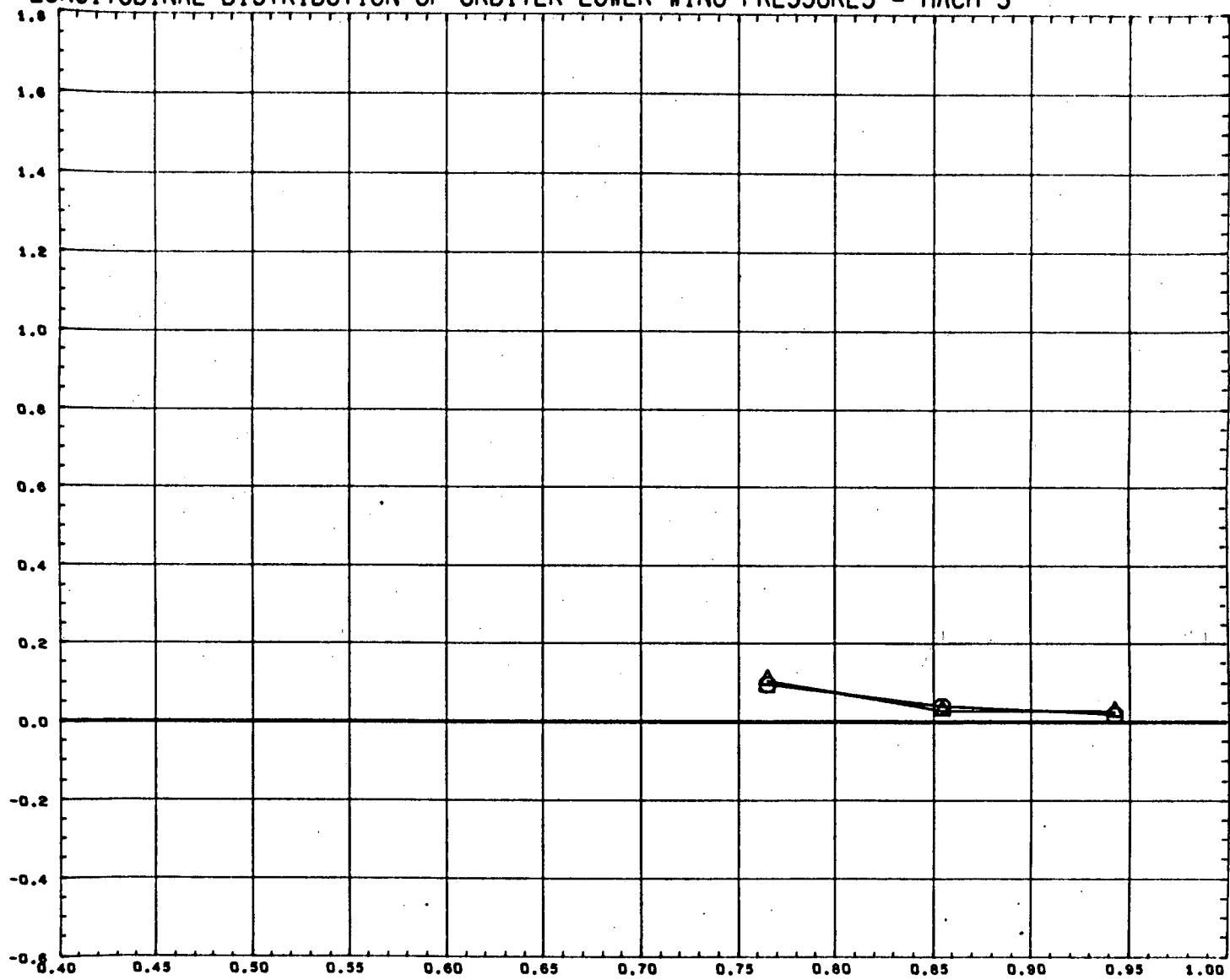
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8314•

PAGE 242

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
 O - 0.390 0.568 0.908
 Δ 0.521

PARAMETRIC VALUES
 ALPHAB 5.017 MACH 3.000
 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

REFERENCE FILE

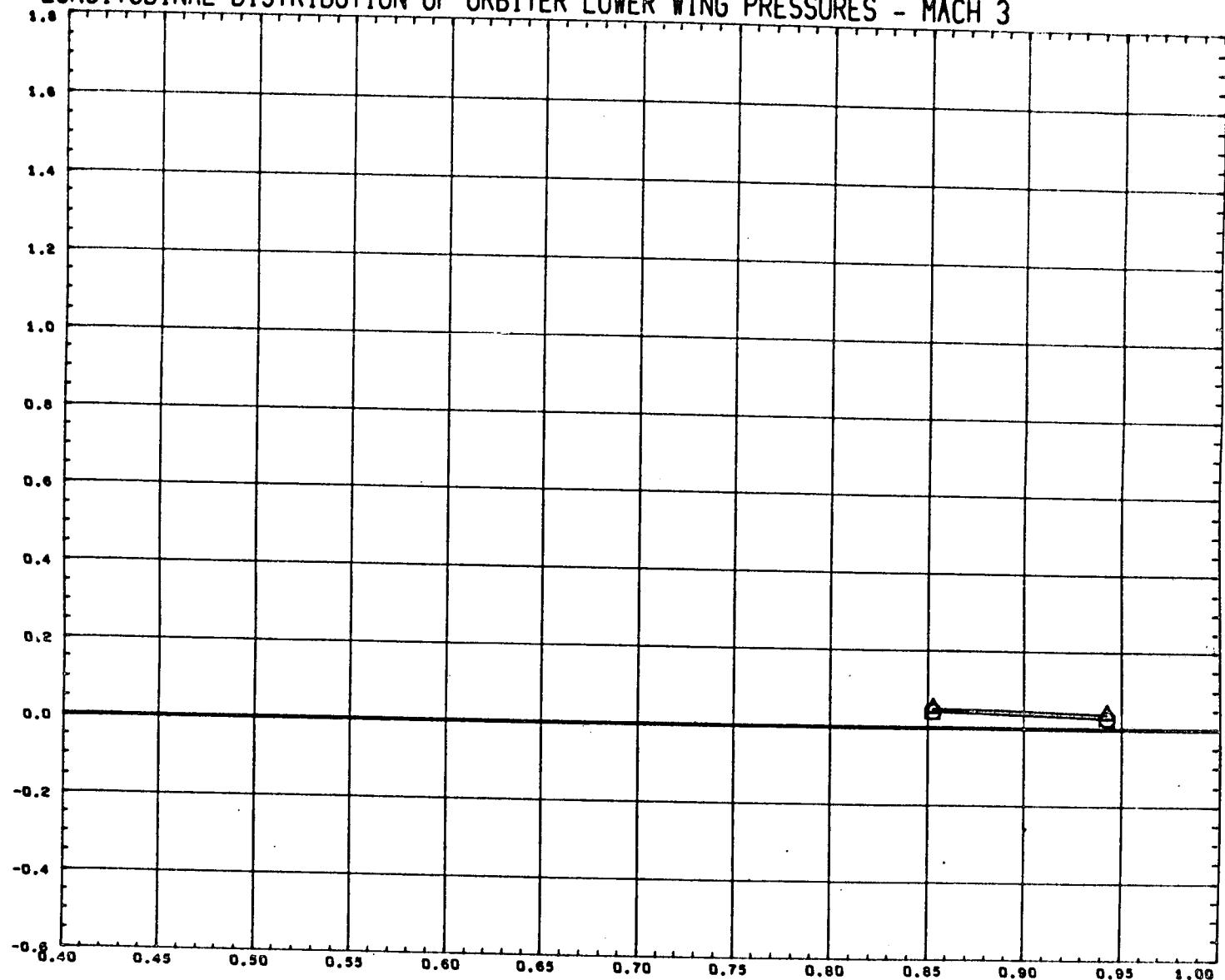
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8314•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
 O - 0.390 0.738 0.908
 △ 0.521

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 5.017 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

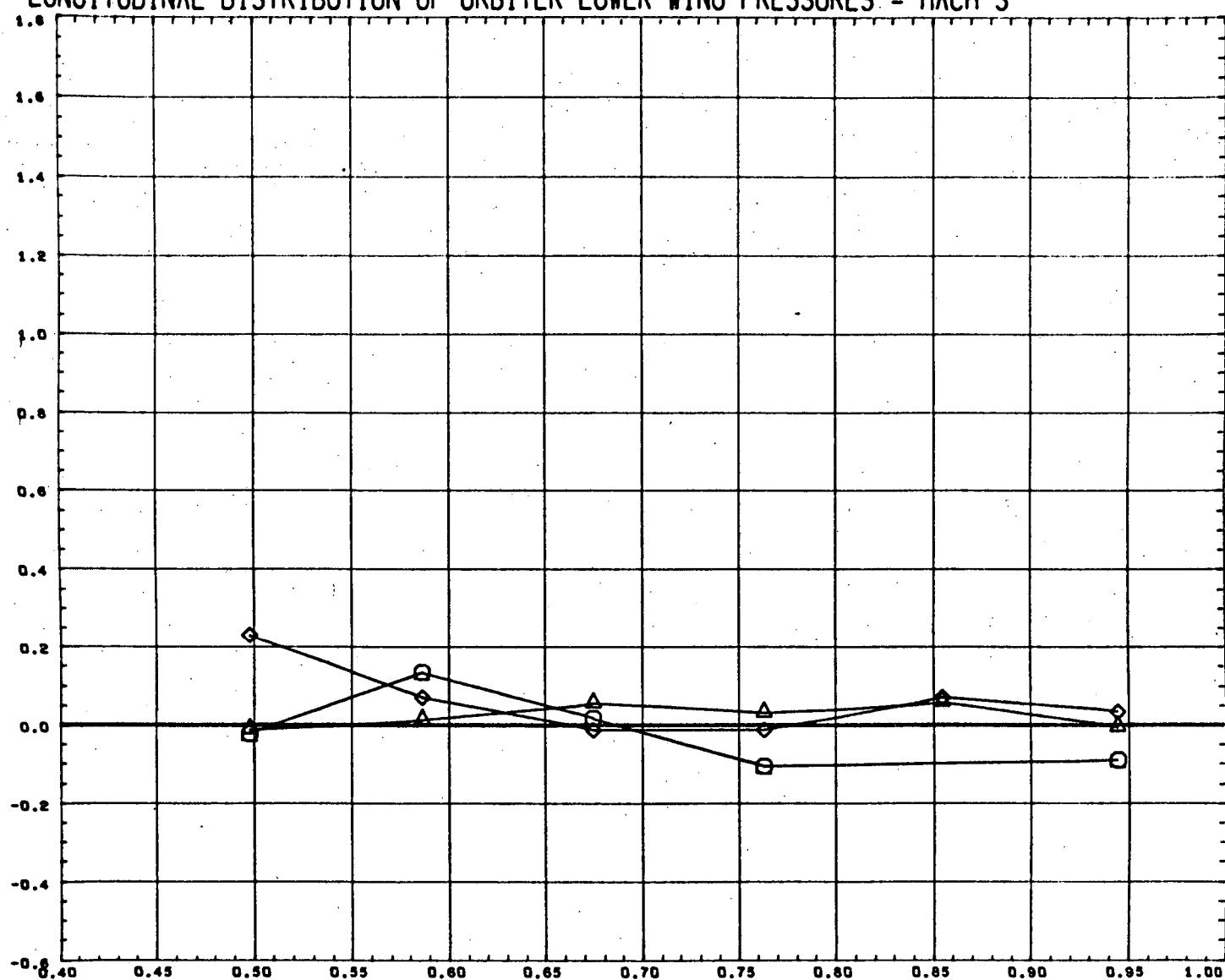
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8314•

PAGE 244

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 0.230 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

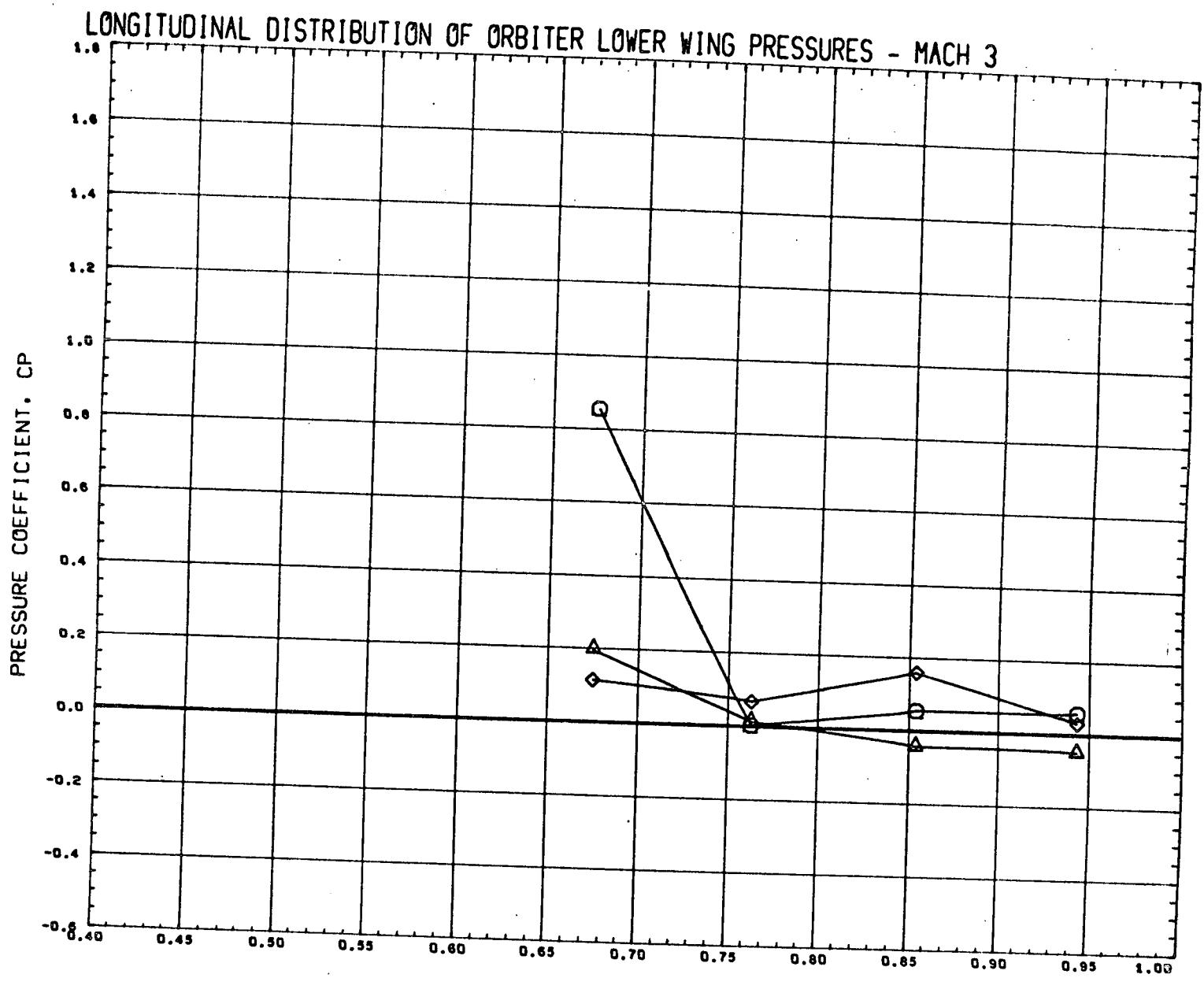
| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|---------|
| ALPHAB | 10.003 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8315•

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| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 10.003 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

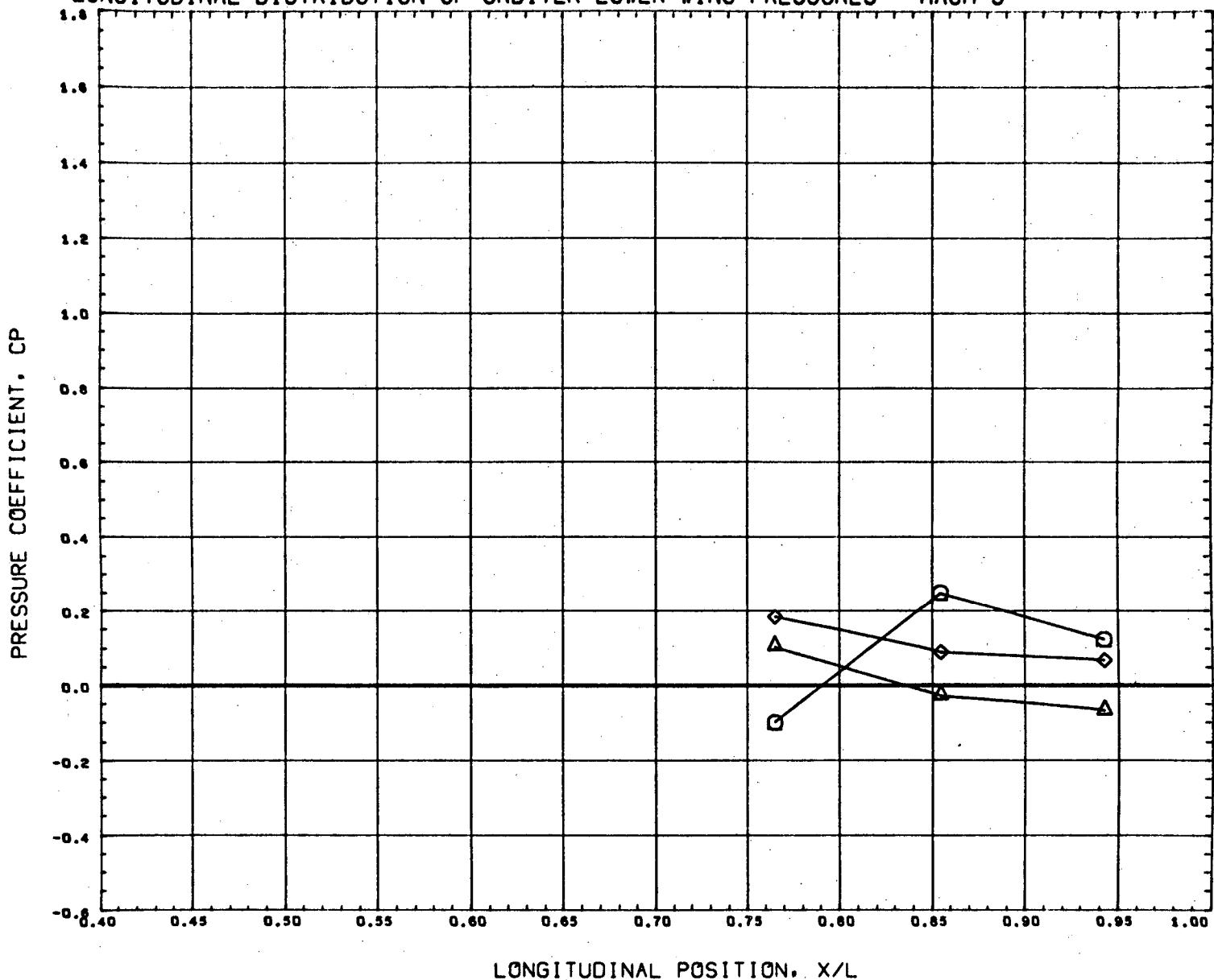
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8315•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



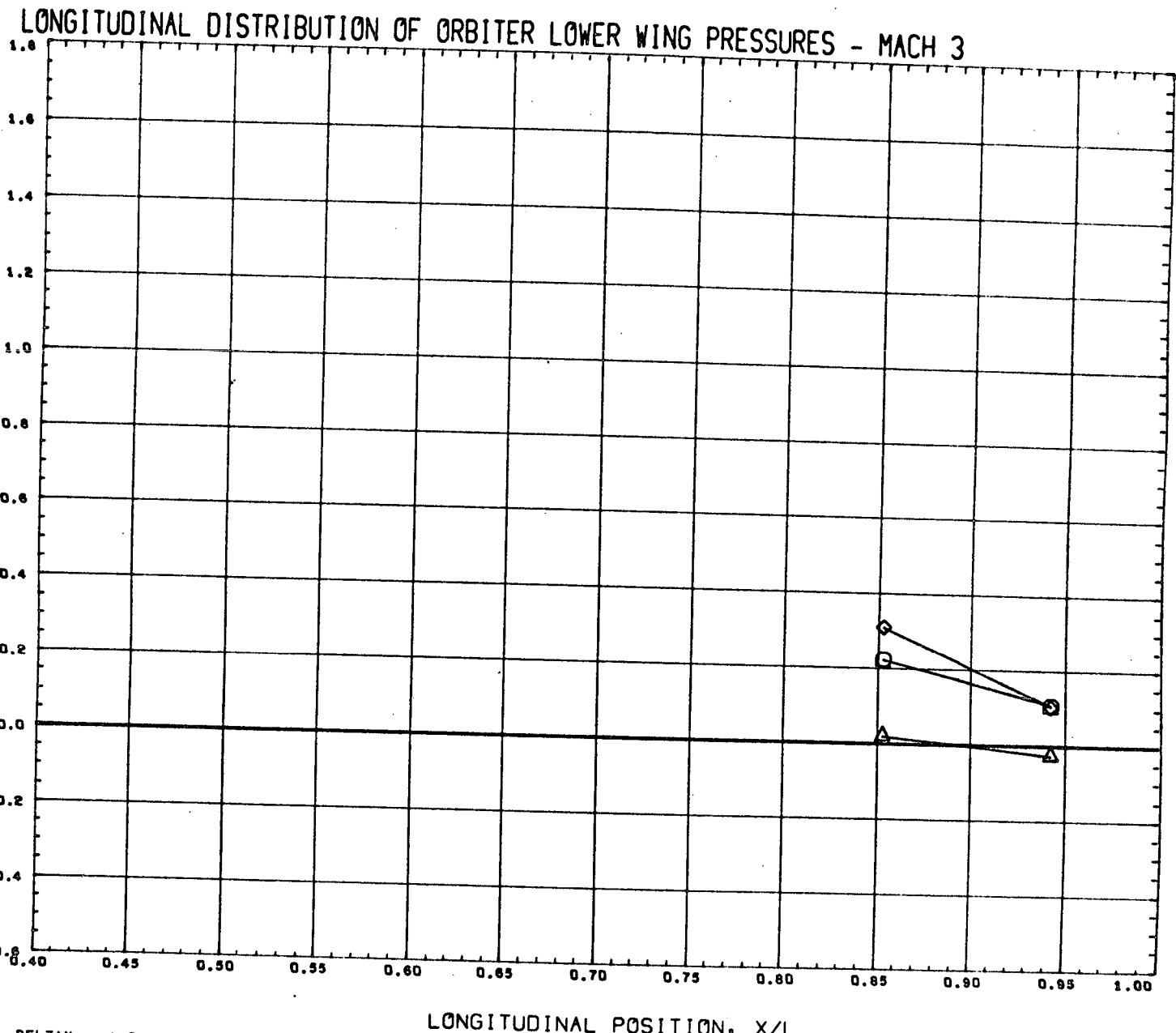
REFERENCE FILE

AEDC VA11163 MDAC ORBITER (LOWER WING)

•HT8315•

PAGE 247

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

○ - 0.143 0.738 0.120

□ 0.103

△ 0.227

PARAMETRIC VALUES

| ALPHAB | 10.003 | MACH | 3.000 |
|--------|--------|--------|---------|
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

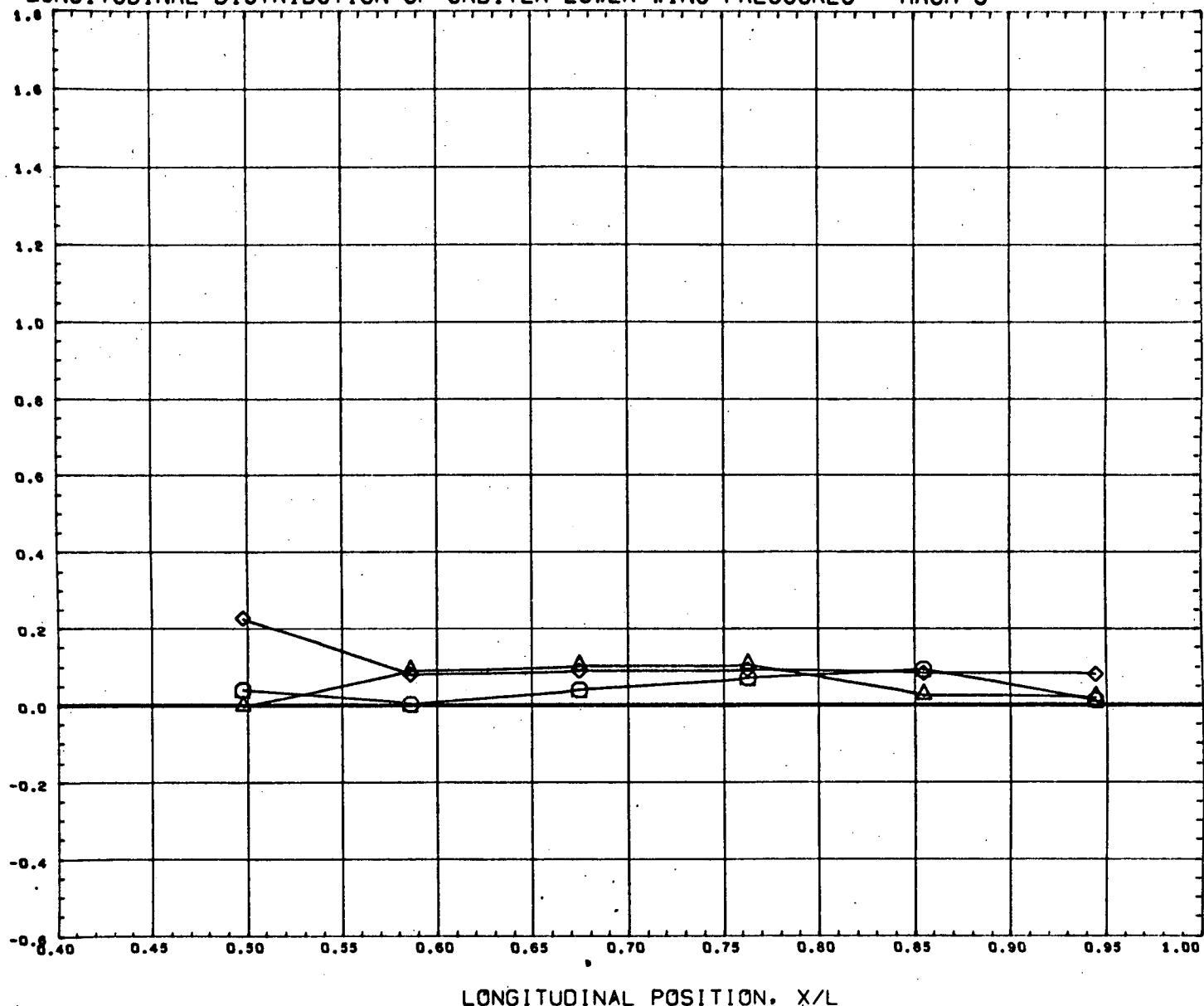
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8315•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

| | | | | |
|------------|---|-------|-------|-------|
| \circ | - | 0.143 | 0.230 | 0.151 |
| \diamond | - | 0.104 | | |
| \square | - | 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|---------|
| ALPHAB | 10.003 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

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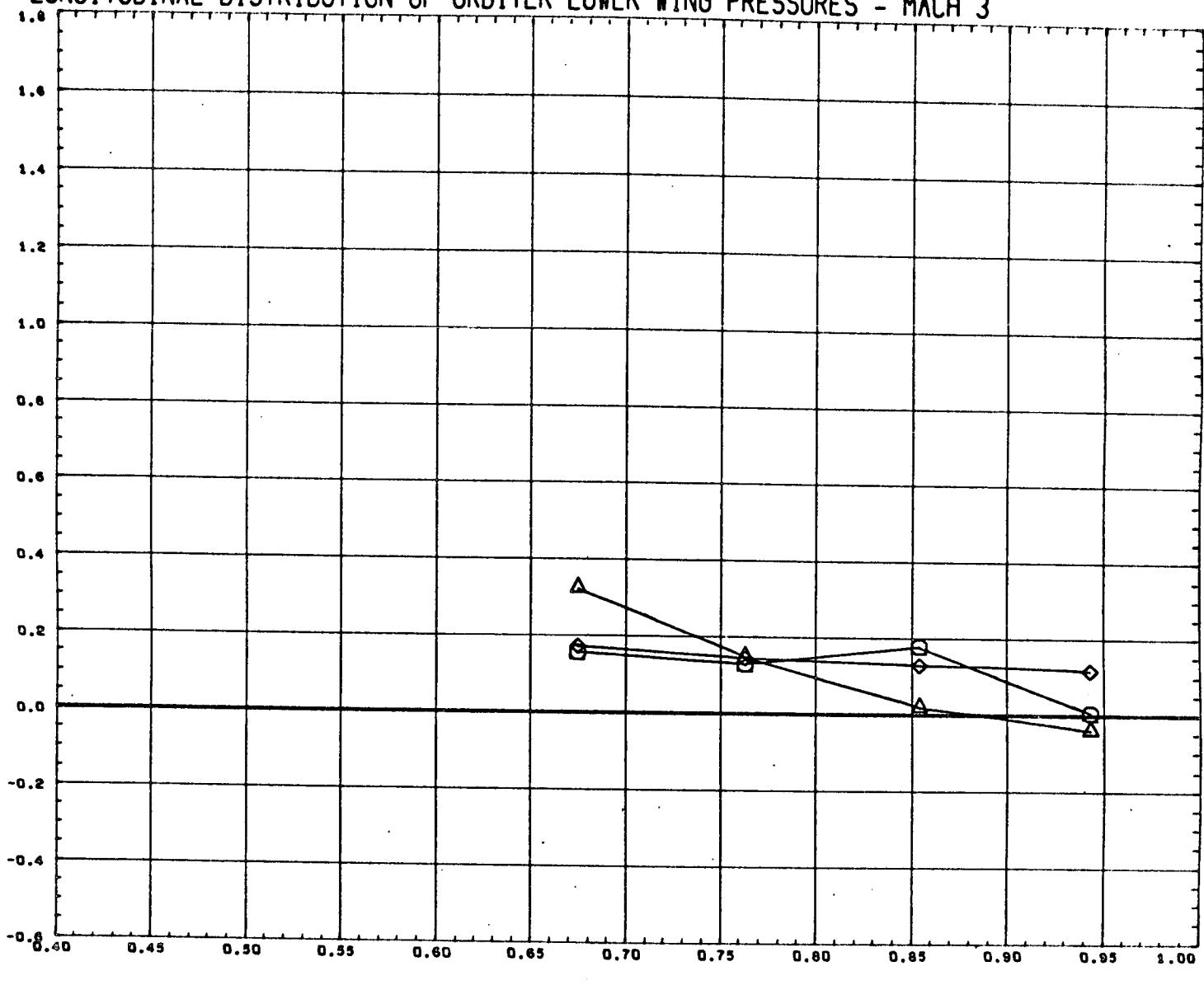
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8315•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 0.399 | 0.151 |
| △ | 0.104 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 10.003 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

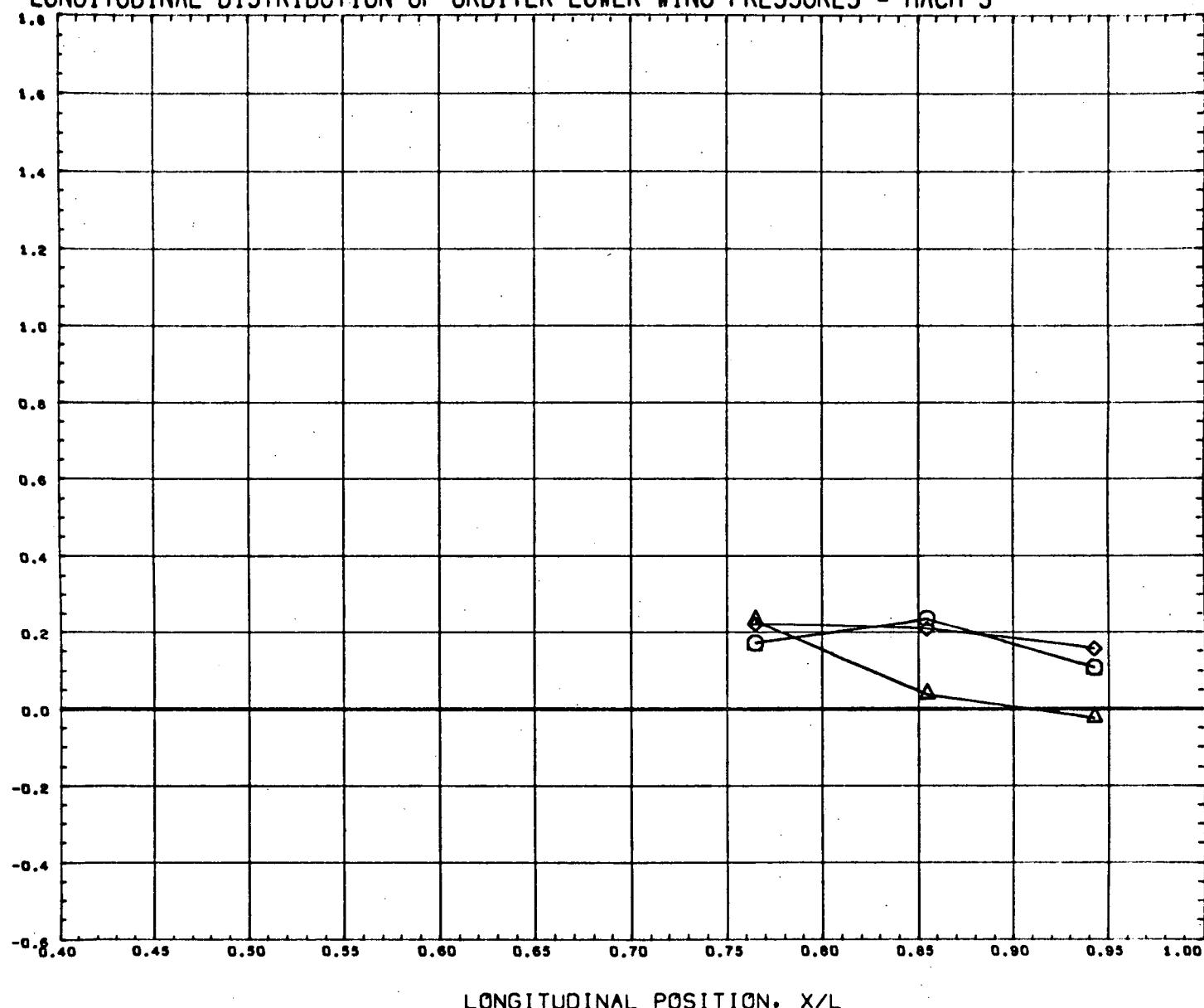
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8315•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|-------------|--------|-------|--------|
| \triangle | -0.143 | 0.568 | 0.151 |
| \square | 0.104 | | |
| \diamond | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 10.003 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

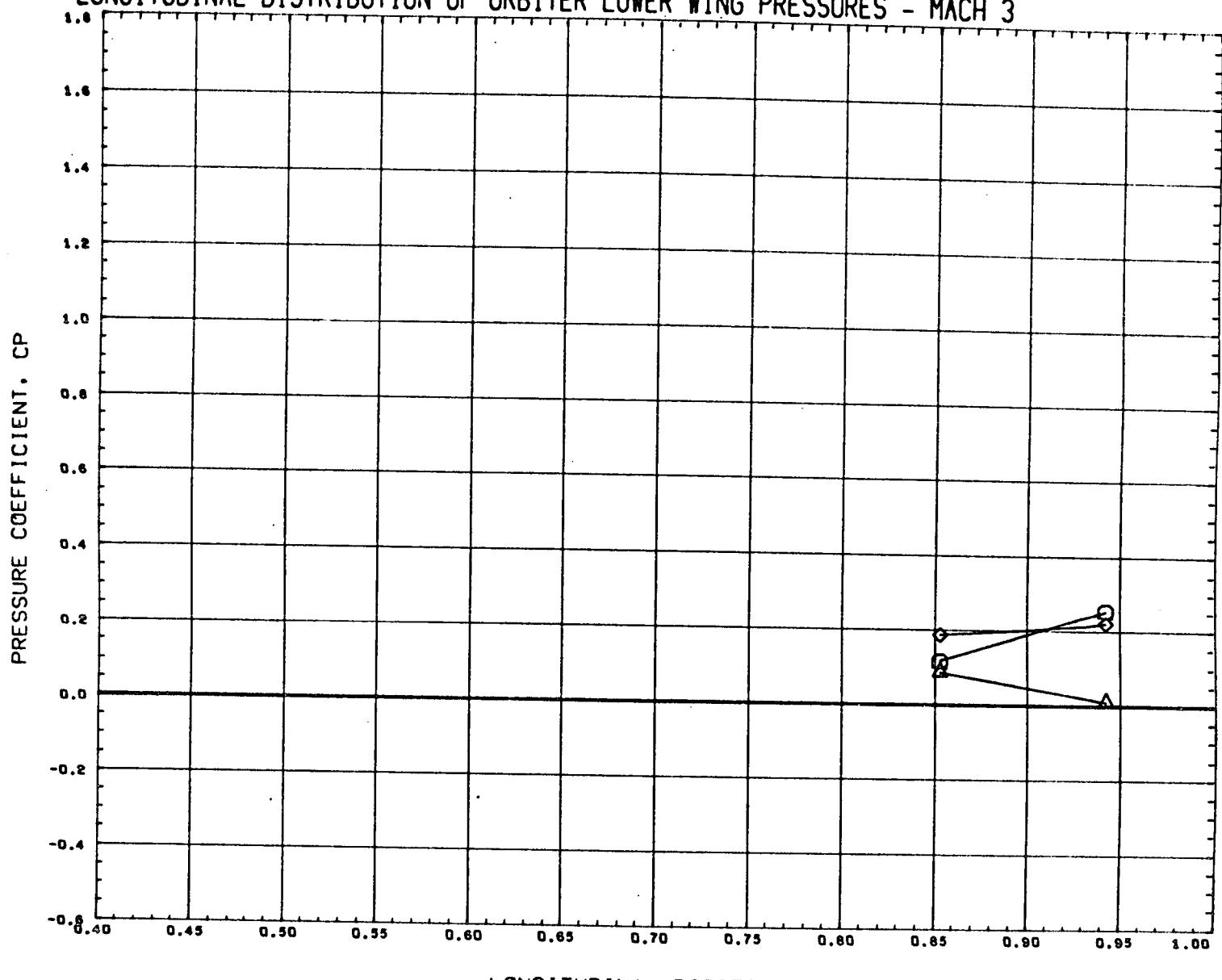
REFERENCE FILE

AEDC VA1163 MOAC ORBITER (LOWER WING)

•HT8315•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 0.738 | 0.151 |
| △ | 0.104 | | |
| ◊ | 0.226 | | |

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|--------|------------------|
| ALPHAB | 10.003 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

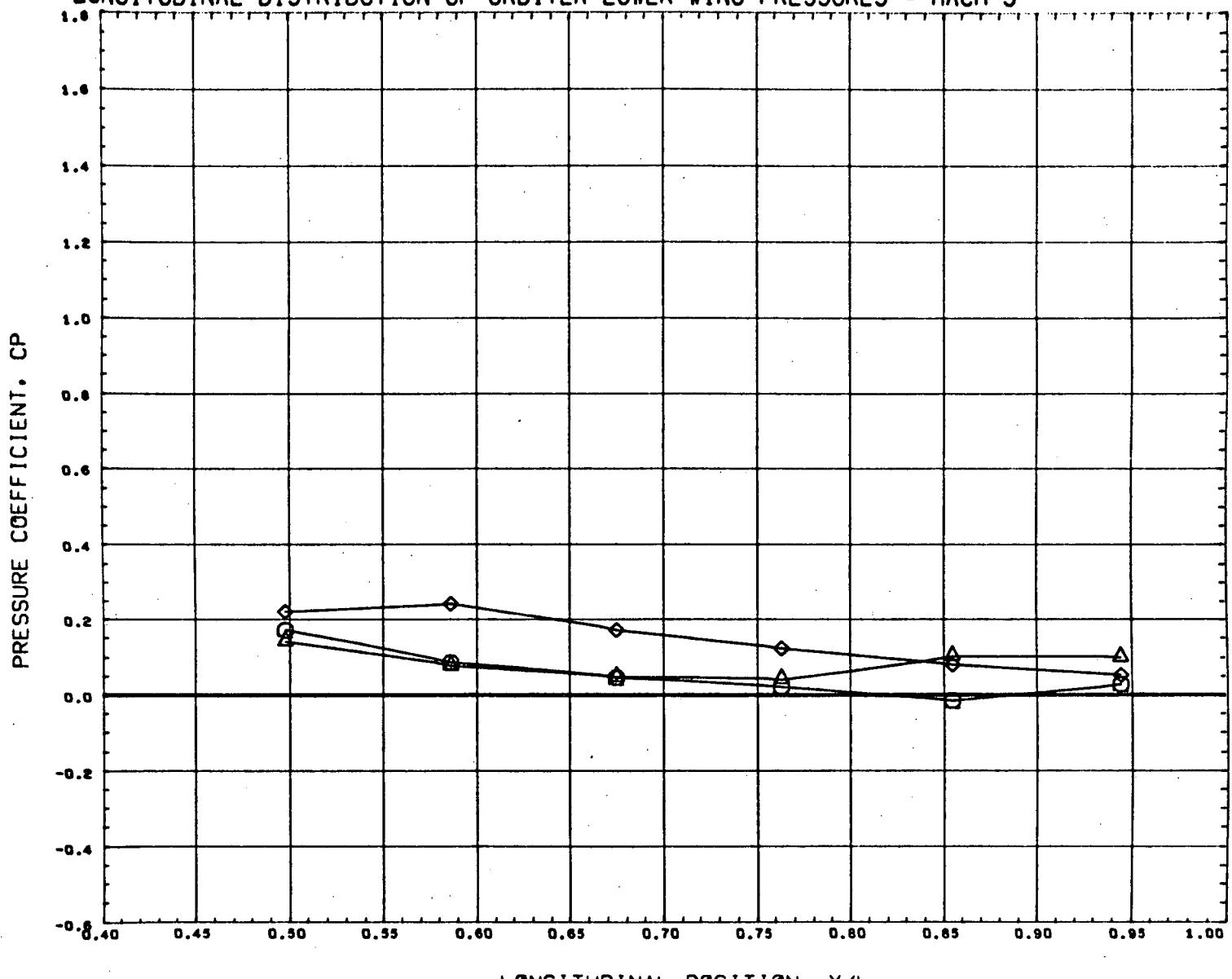
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8315•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 ◊ - 0.143 0.230 0.228
 △ 0.103 0.226
 ◇ 0.226

PARAMETRIC VALUES
 ALPHAB 10.003 MACH 3.000
 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

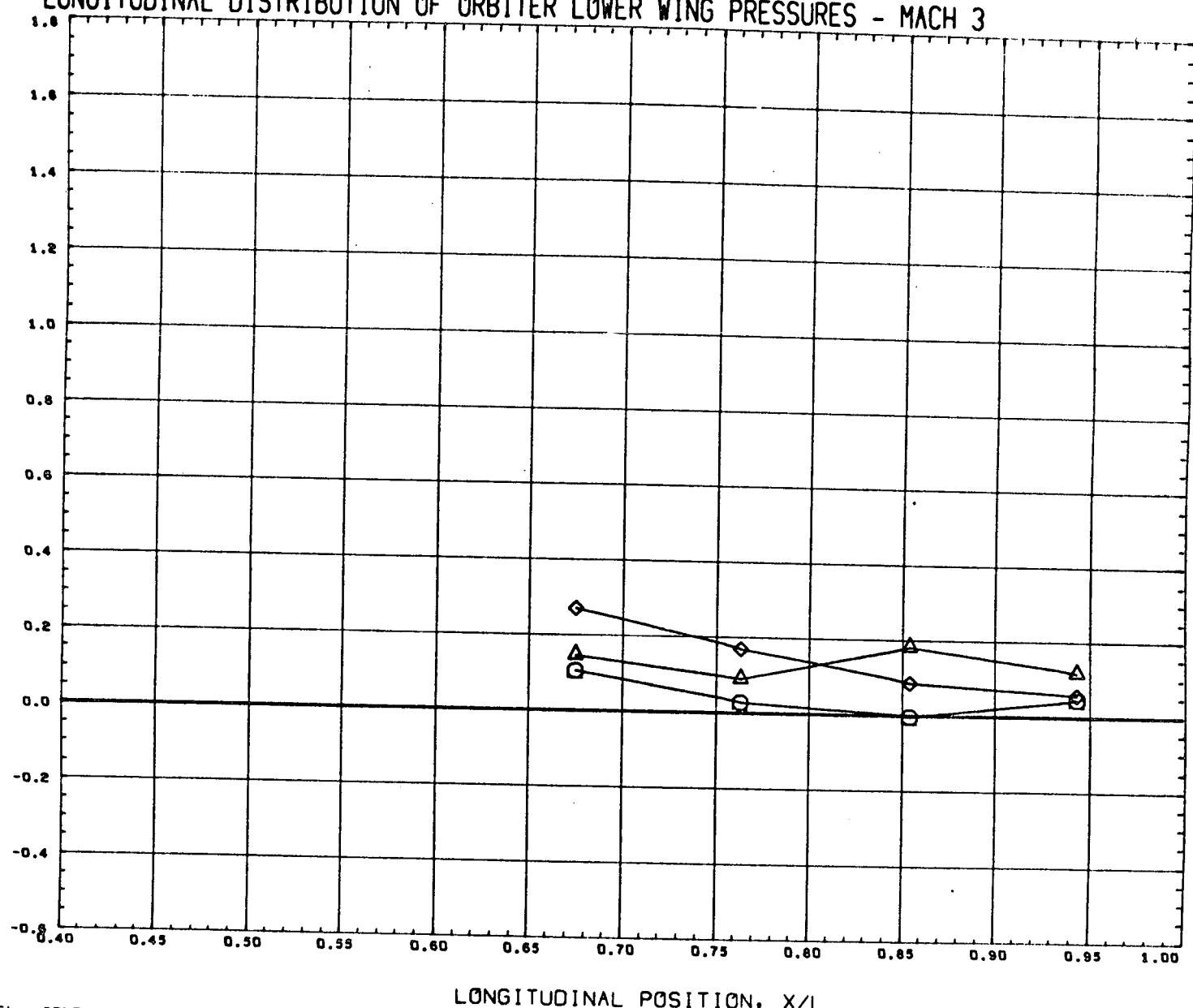
•HT8315•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX Y/B DELTAZ

○ - 0.143 0.399 0.228

△ 0.103

◊ 0.226

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|---------|
| ALPHAB | 10.003 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

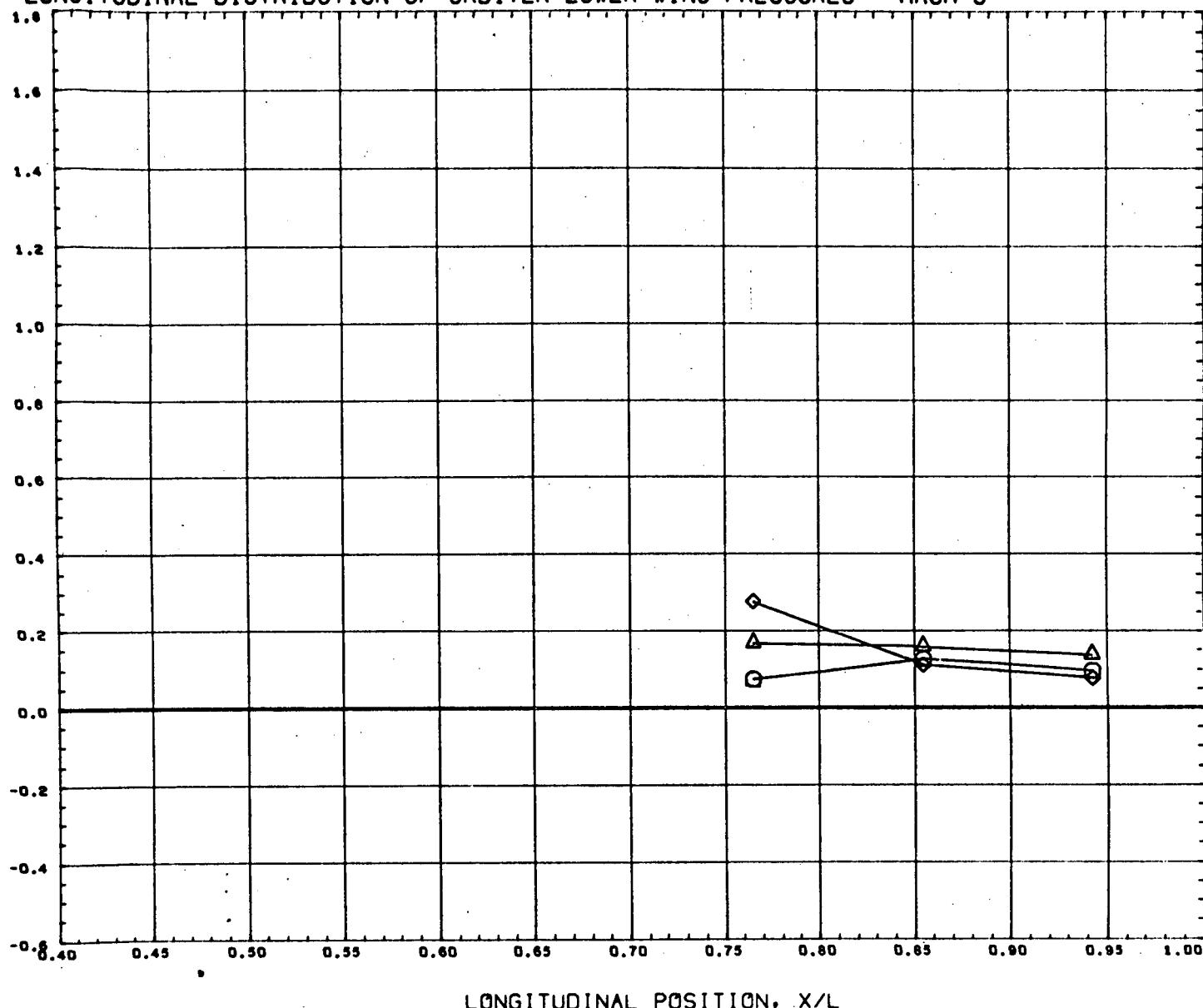
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8315•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| - | 0.143 | 0.568 | 0.228 |
| △ | 0.105 | | |
| ◊ | 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|---------|
| ALPHAB | 10.003 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

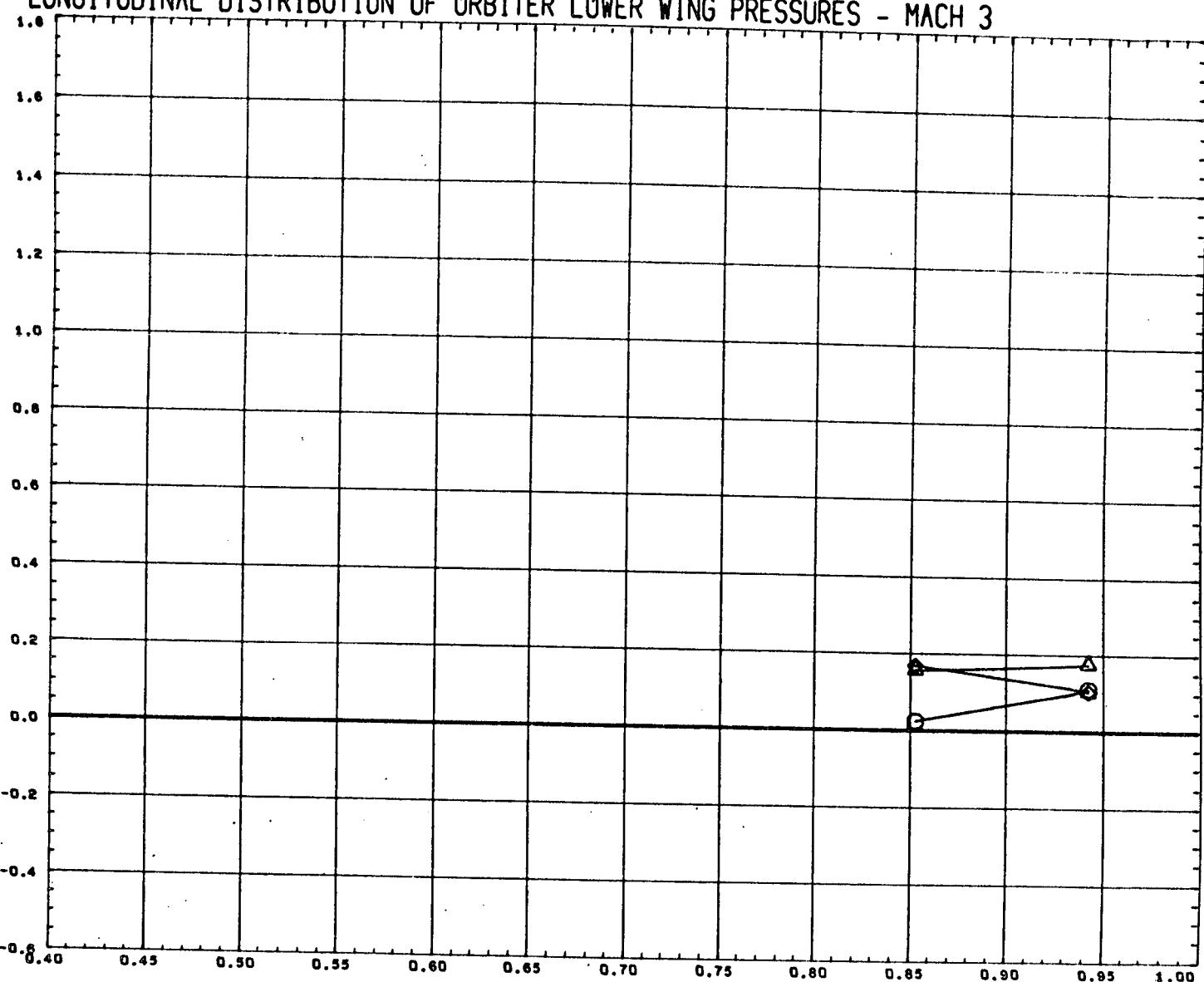
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8315•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|-------------|---------|-------|--------|
| \triangle | - 0.143 | 0.738 | 0.228 |
| \diamond | 0.103 | | |
| \diamond | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 10.003 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

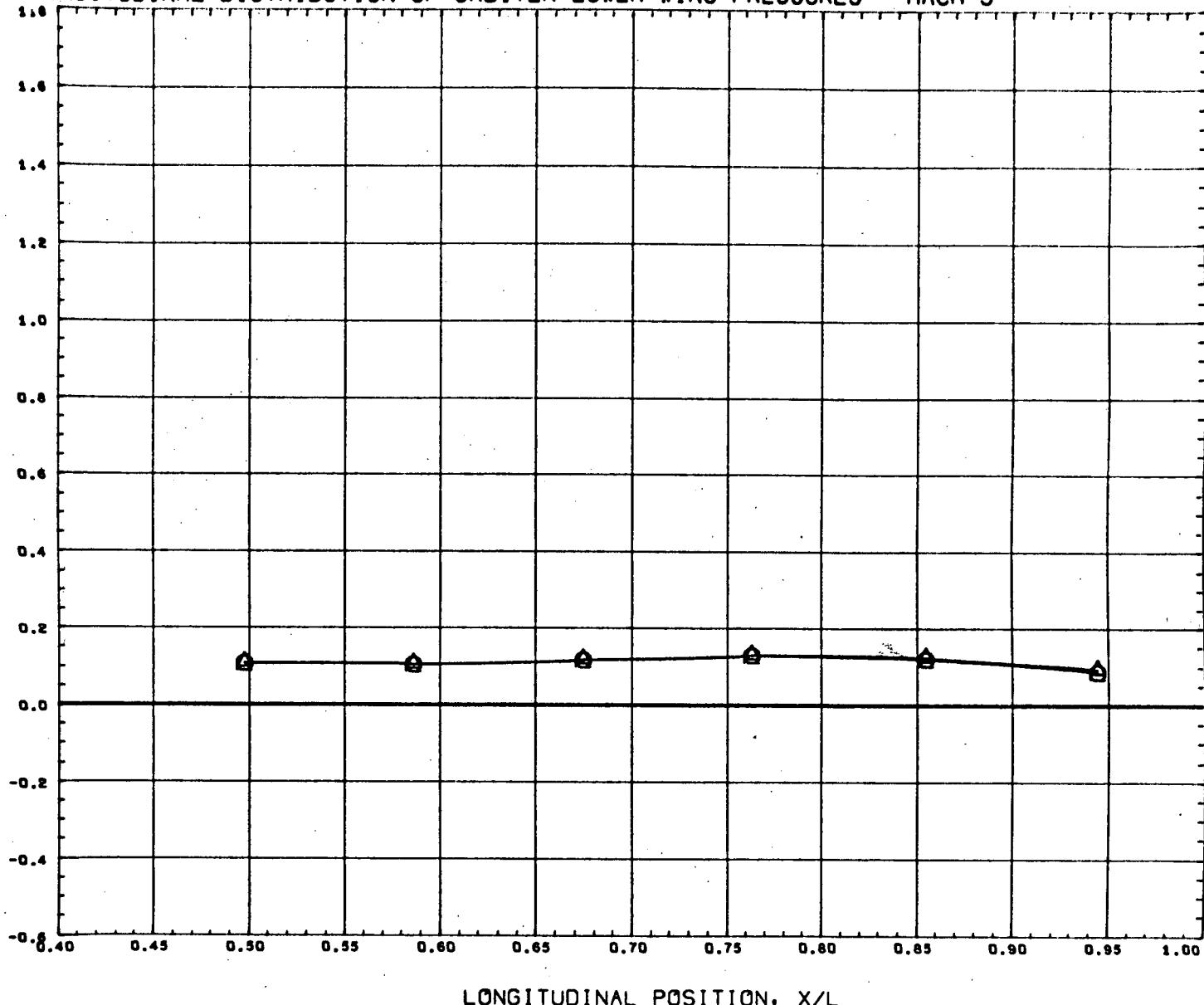
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8315•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| O | - 0.391 | 0.230 | 0.908 |
| △ | 0.518 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|----------------|
| ALPHAB | 10.003 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

REFERENCE FILE

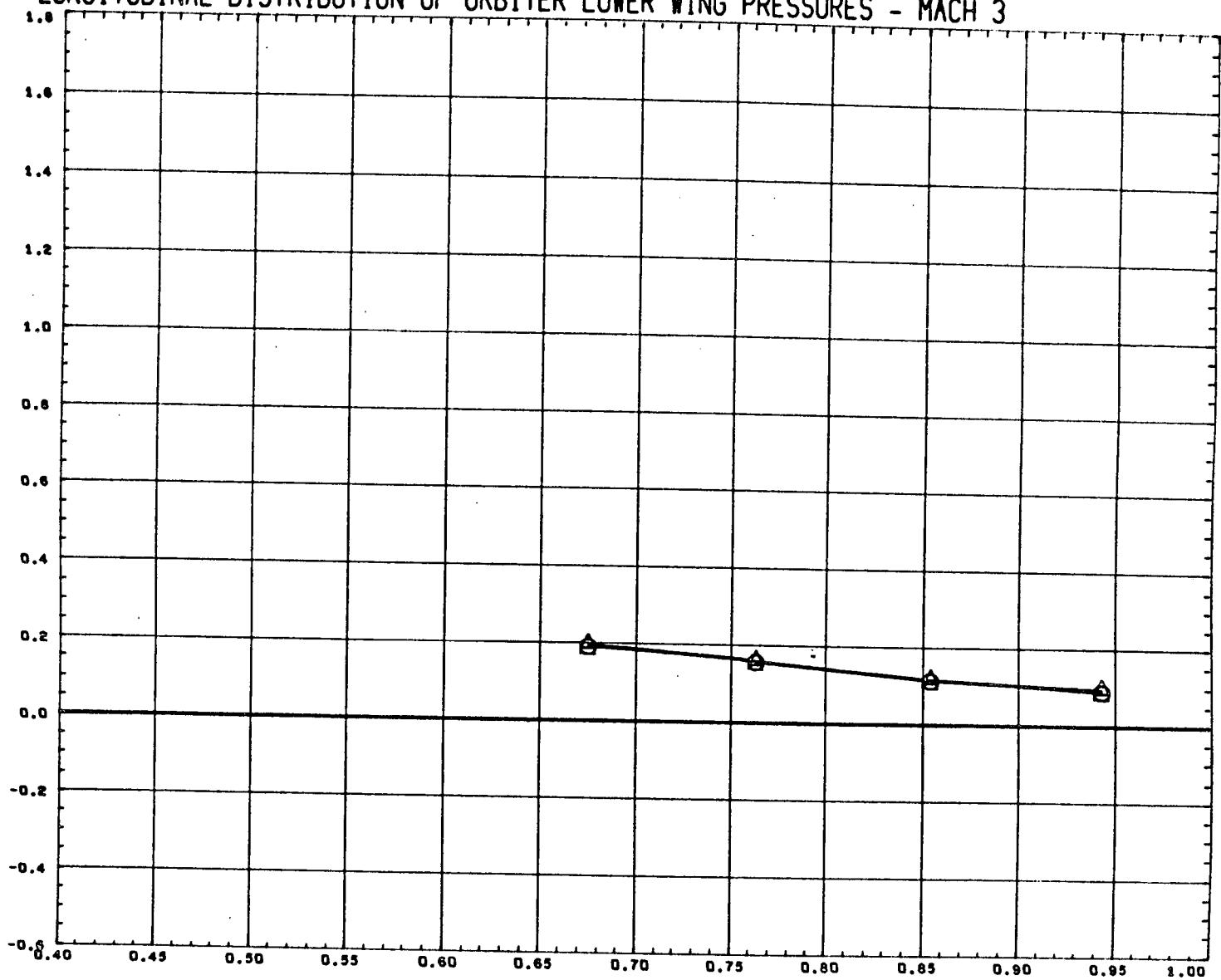
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8315•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

SYMBOL DELTAX Y/B DELTAZ
△ - 0.391 0.399 0.908
 0.518

| PARAMETRIC VALUES | | |
|-------------------|--------|-----------------|
| ALPHAB | 10.003 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

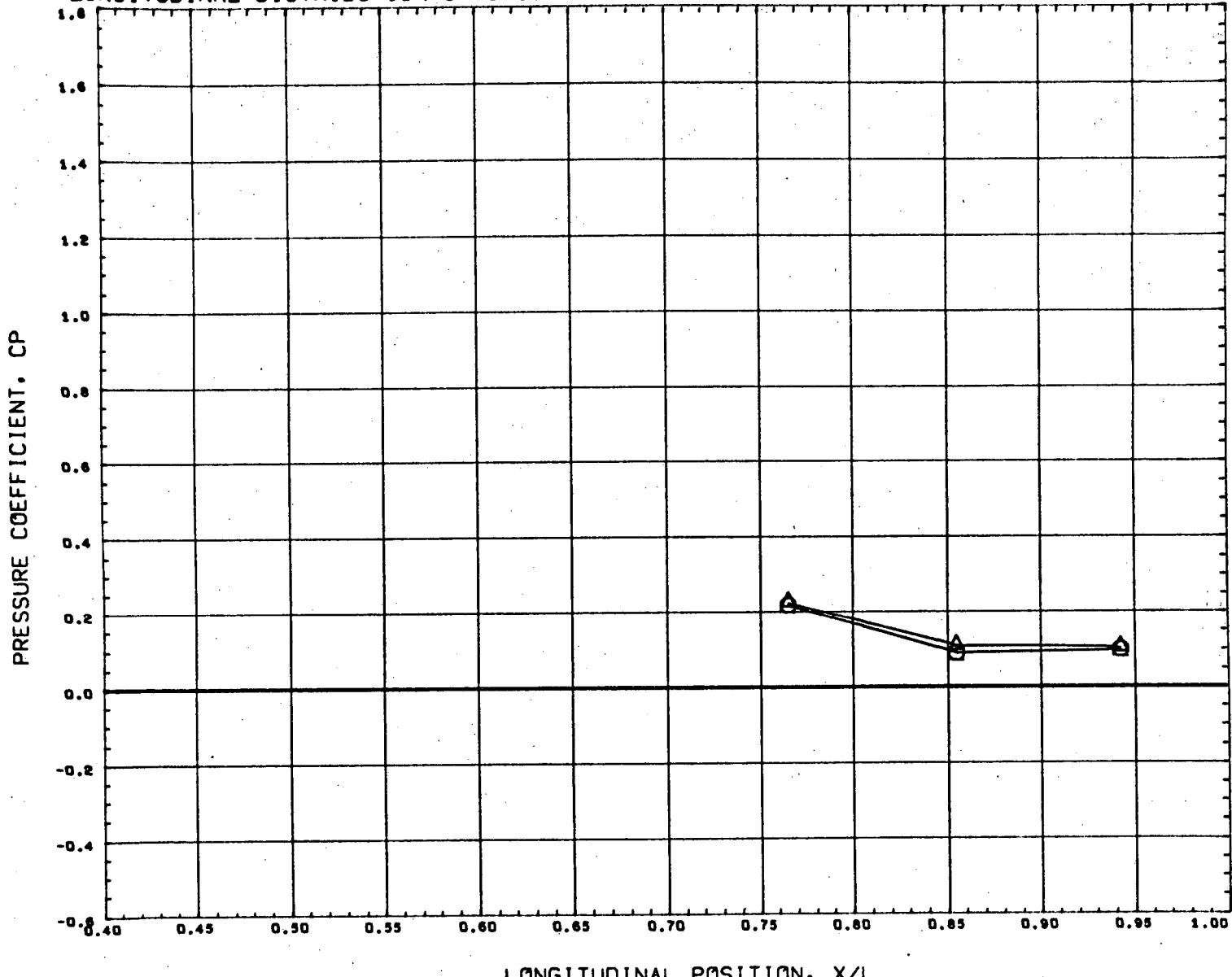
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8315•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 Δ - 0.391 0.568 0.908
 0.318

PARAMETRIC VALUES
 ALPHAB 10.003 MACH 3.000
 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

REFERENCE FILE

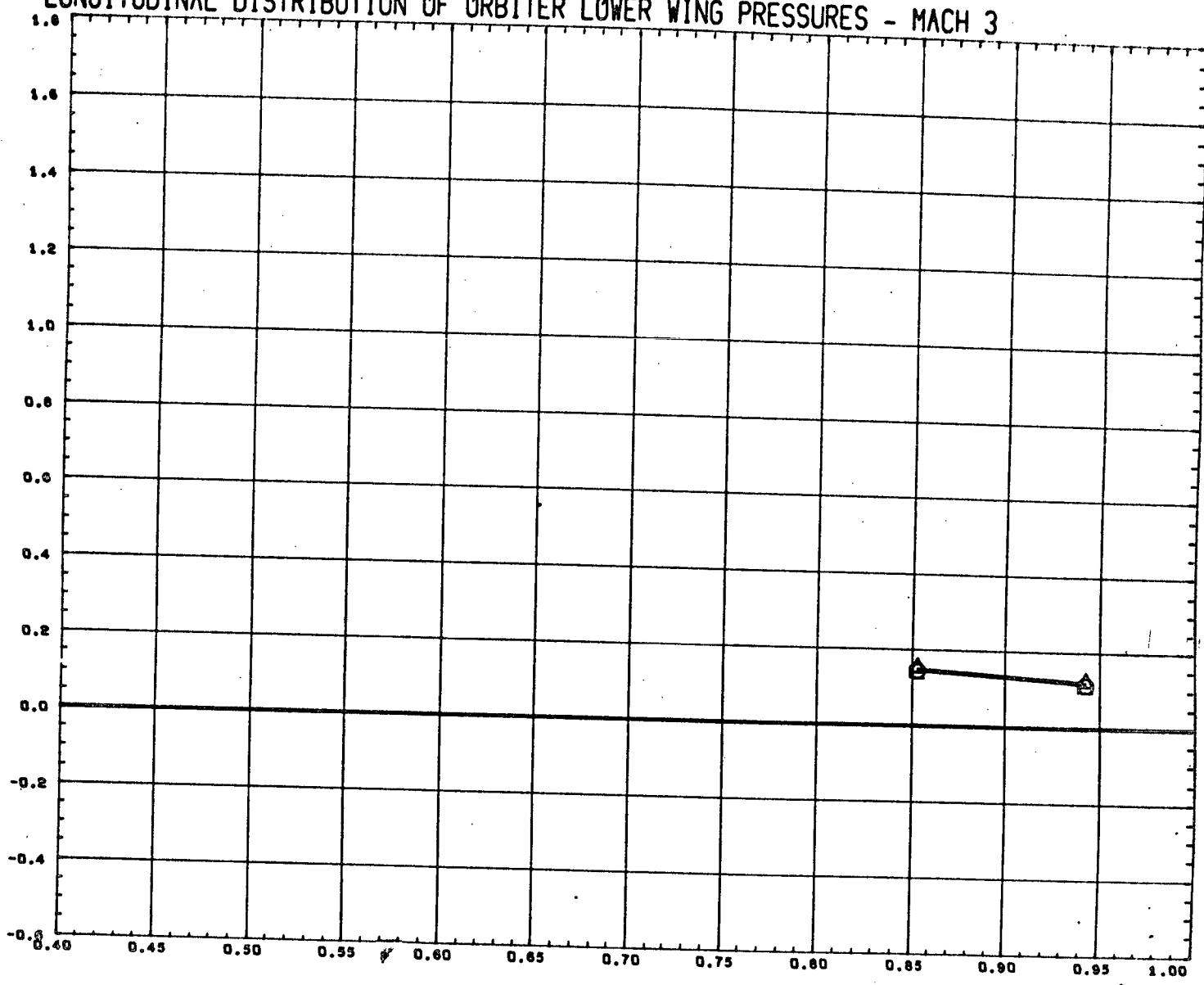
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8315•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

SYMBOL DELTAX Y/B DELTAZ
△ 0.391 0.738 0.908
 0.518

PARAMETRIC VALUES
ALPHAB 10.003 MACH 3.000
ALPHAI 0.000 ORBPOW 100.000
BSTPOW 90.000

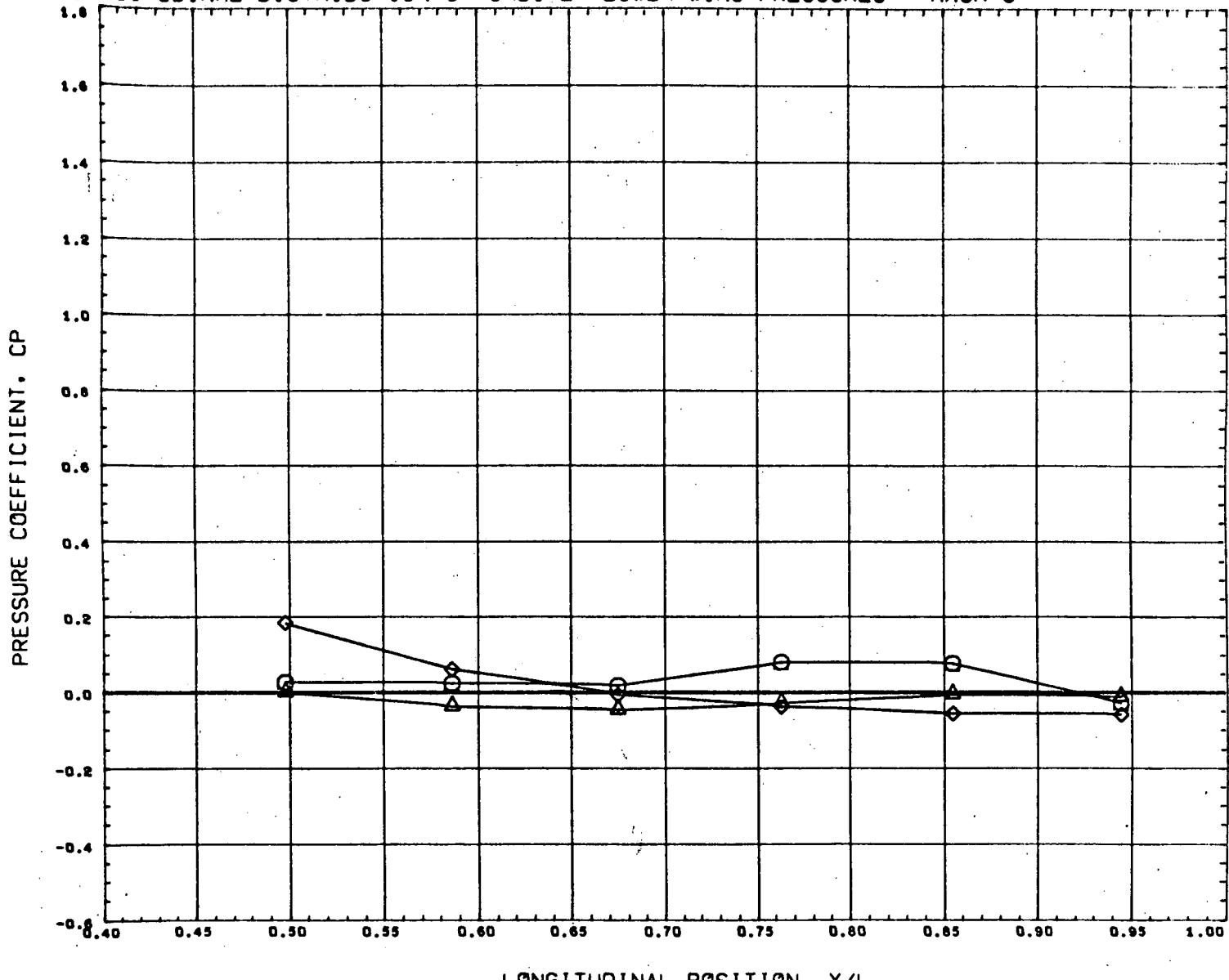
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8315•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 0.230 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|-------|
| ALPHAB | - 9.977 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

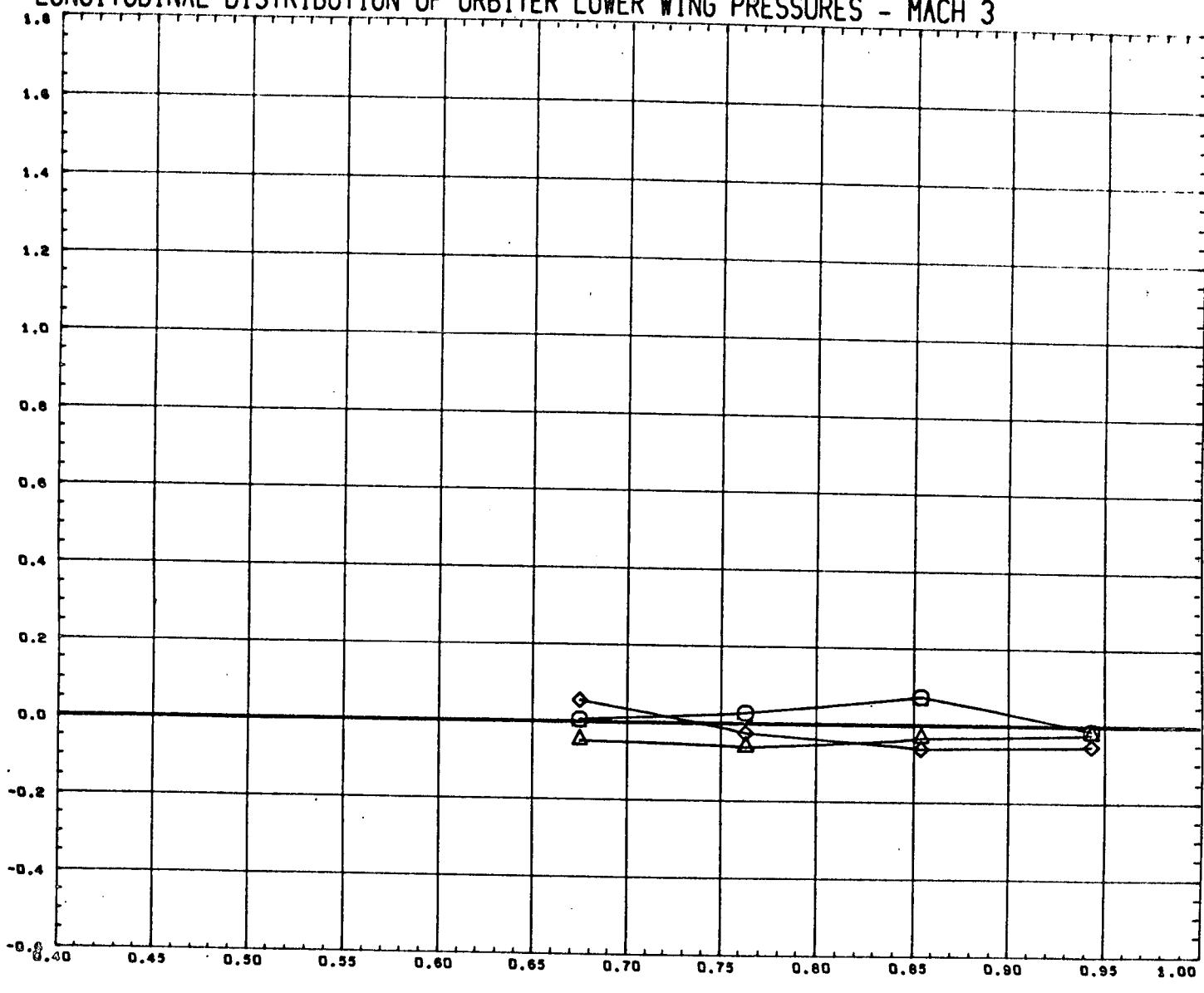
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | -0.143 | 0.399 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 9.977 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

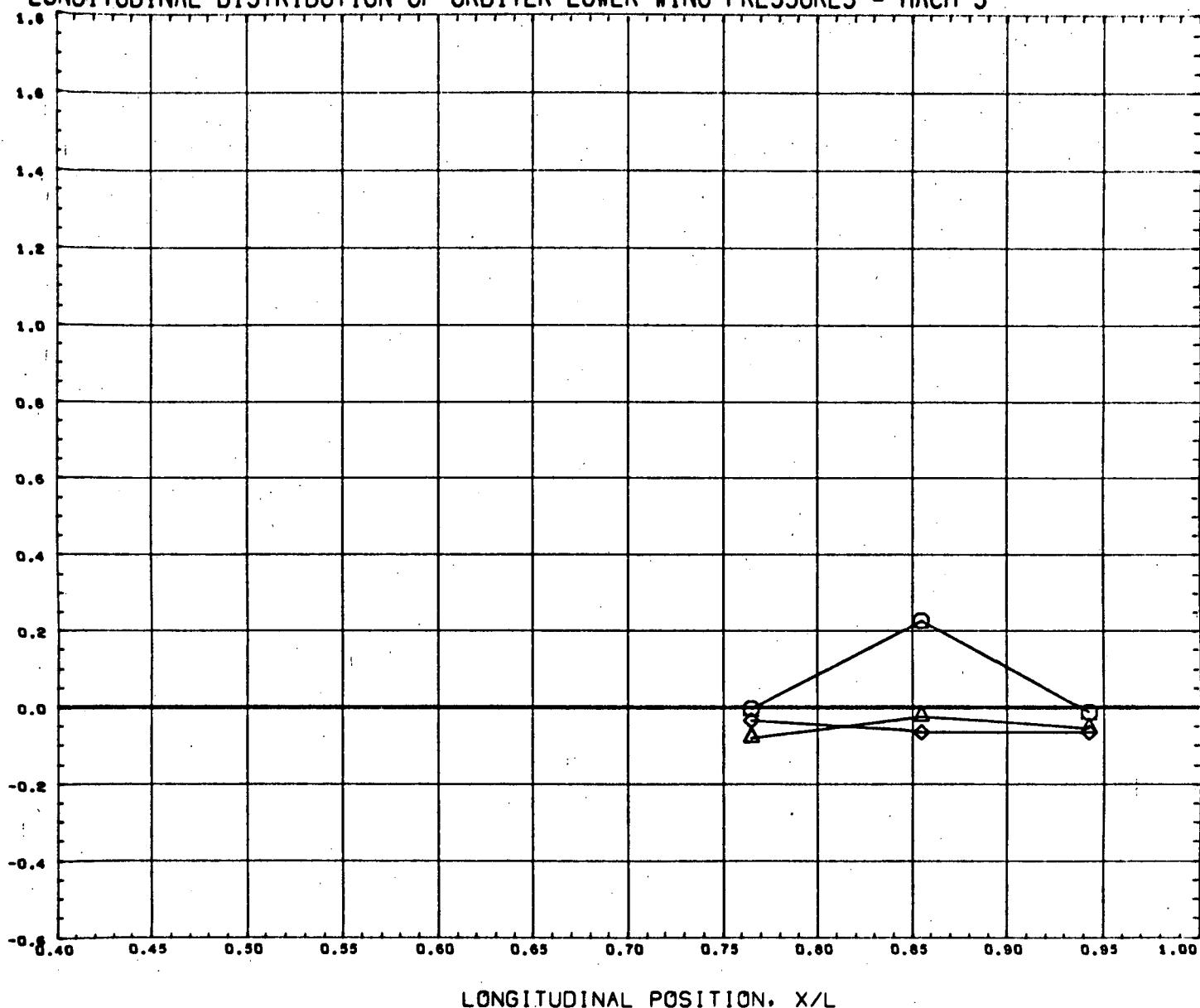
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.143 | 0.568 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 9.977 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

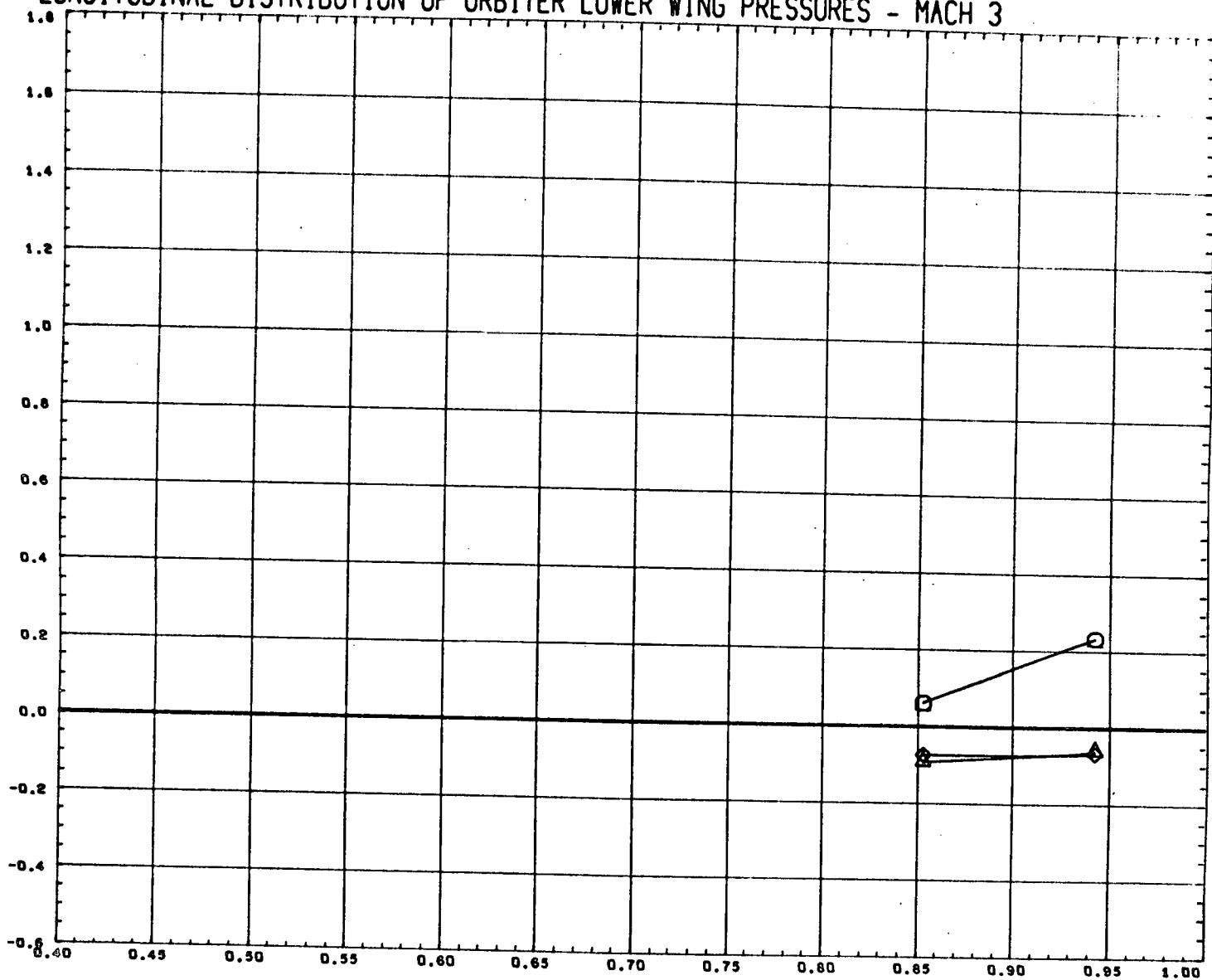
AEDC VA1163 MOAC ORBITER (LOWER WING)

•HT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| - | 0.143 | 0.738 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---|-------|--------|
| ALPHAB | - | 9.977 | MACH |
| ALPHAI | | 0.000 | ORBPOW |
| BSTPOW | | 0.000 | 0.000 |

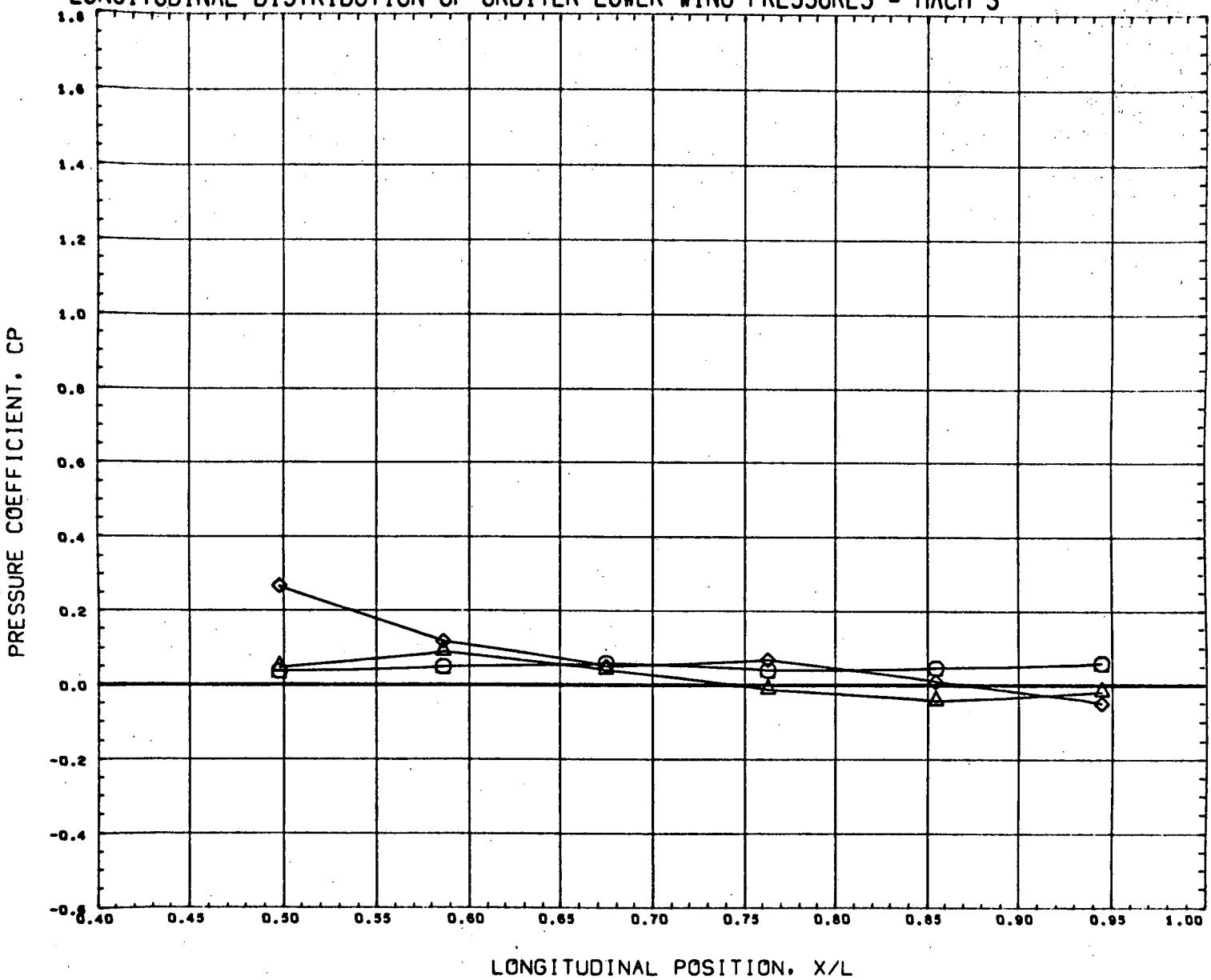
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O - 0.144 0.230 0.151
 0.103
 0.227

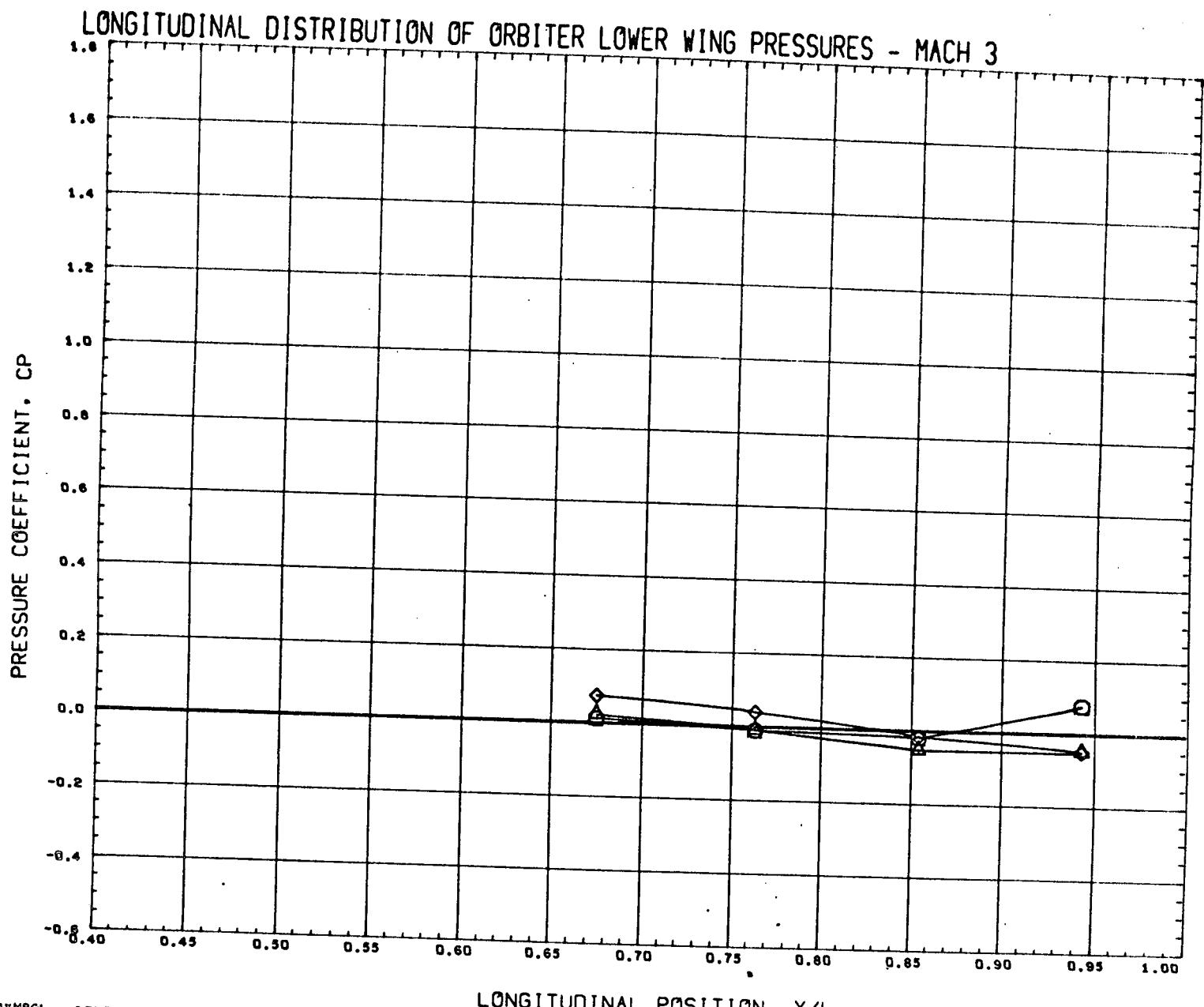
PARAMETRIC VALUES
 ALPHAB - 9.977 MACH 3.000
 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8321•

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| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 9.977 | MACH 3,000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

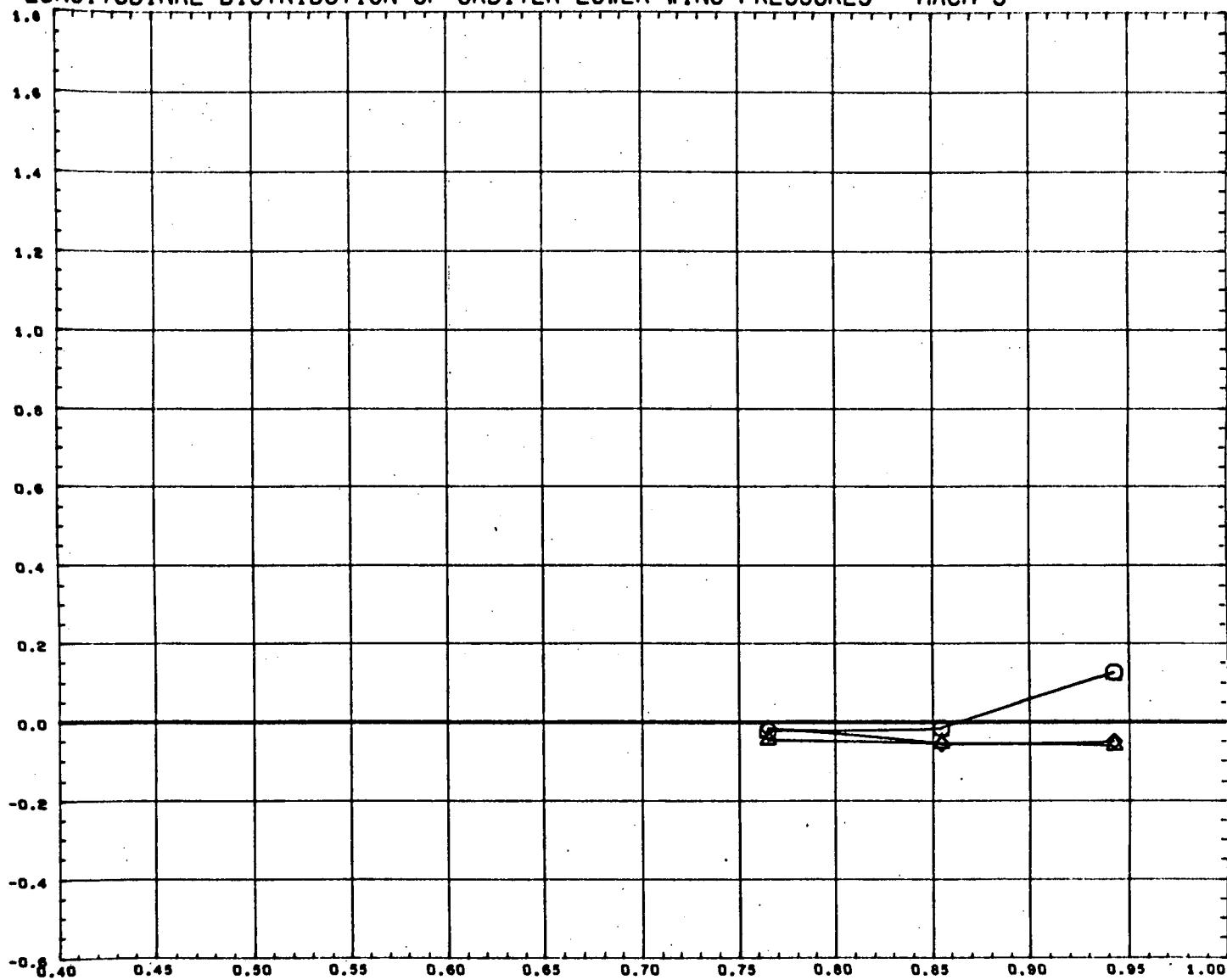
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTA X | Y/E | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.144 | 0.568 | 0.151 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 9.977 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

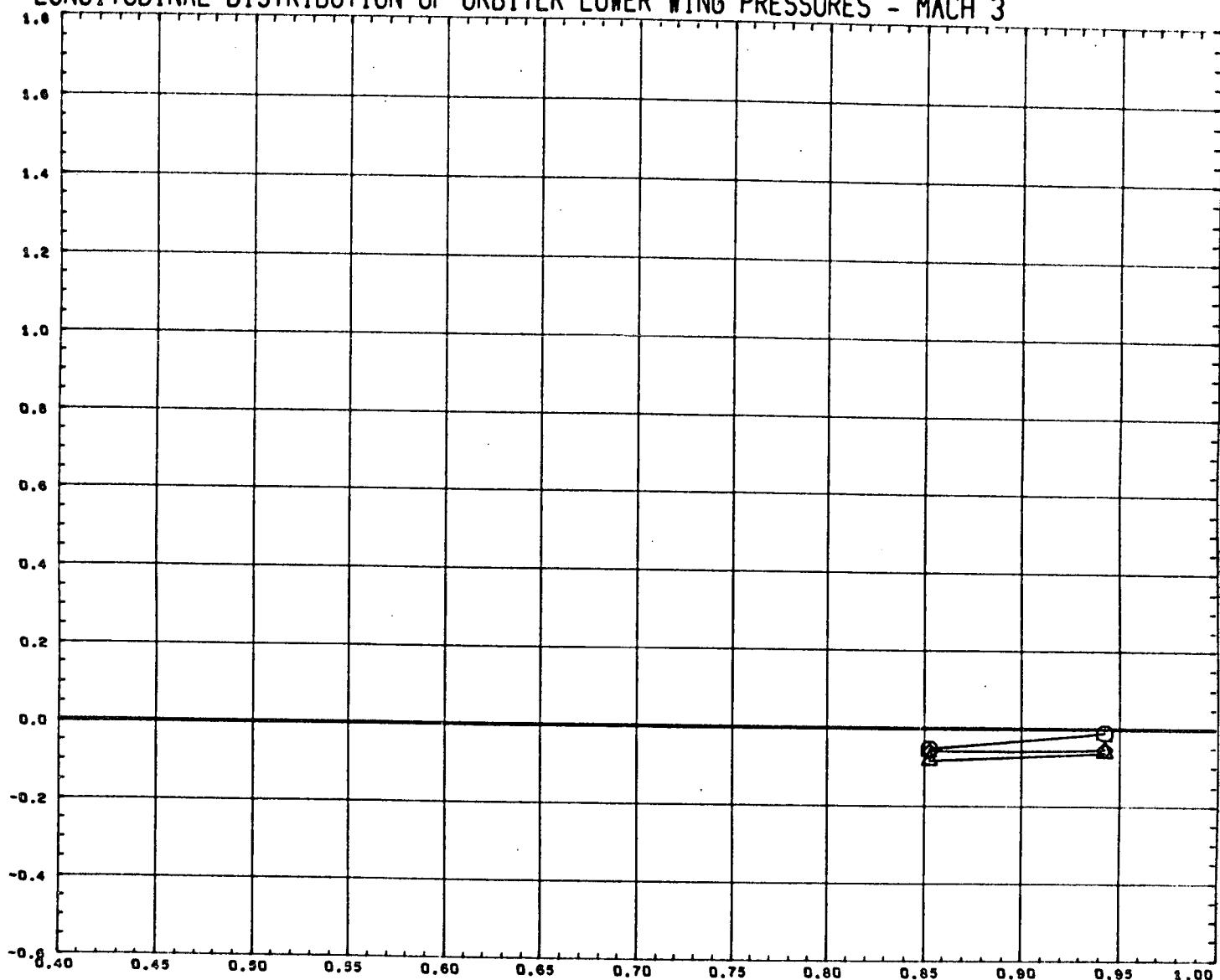
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8321•

PAGE 267

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| | -0.144 | 0.738 | 0.151 |
| | 0.103 | | |
| | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|---|-------|
| ALPHAB | - | 9.977 |
| ALPHAT | - | 0.000 |
| BSTPOW | - | 0.000 |
| MACH | - | 3.000 |
| ORBPOW | - | 0.000 |

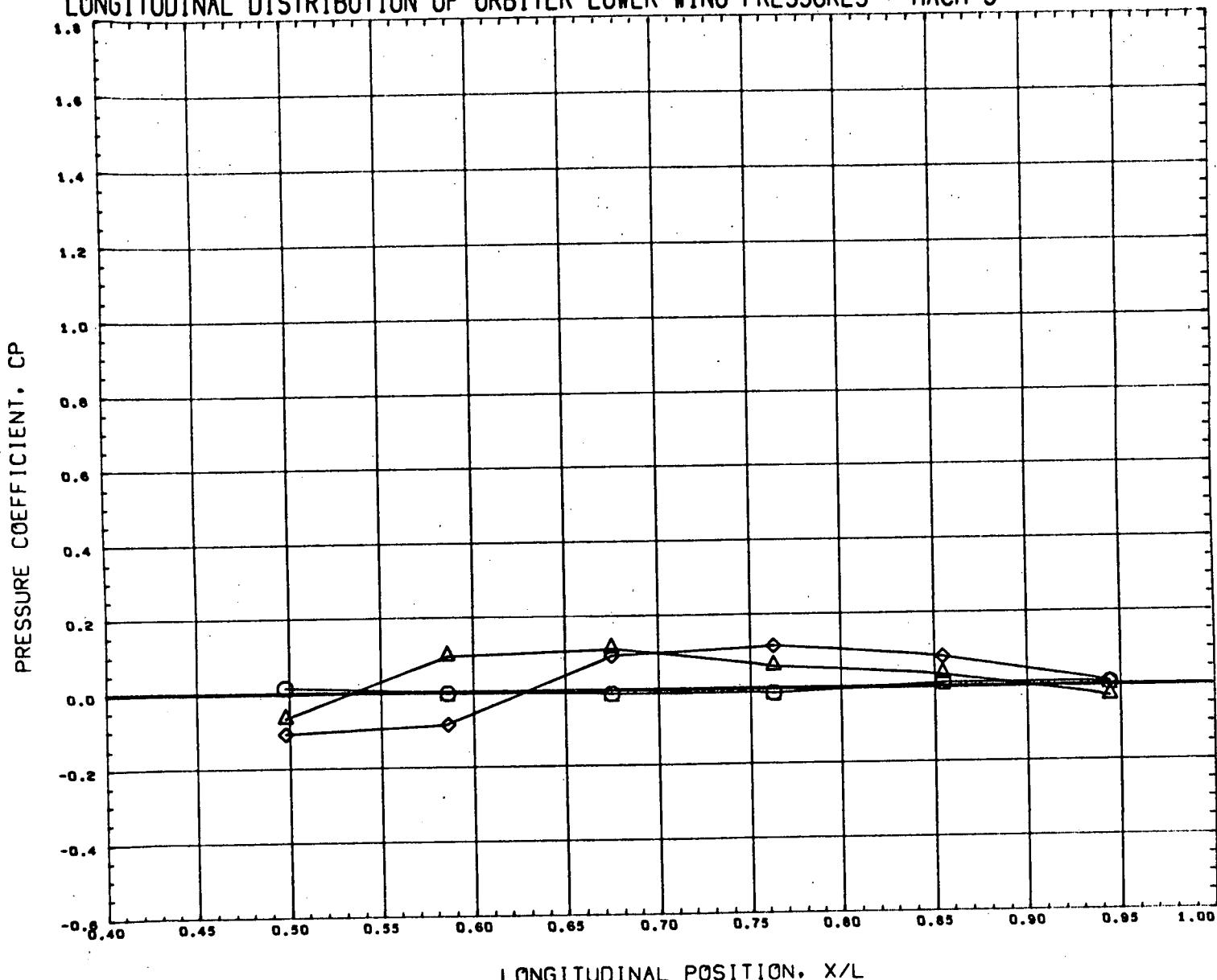
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | | |
|---|---|-------|-------|-------|
| ○ | - | 0.143 | 0.230 | 0.228 |
| △ | - | 0.103 | | |
| ◊ | - | 0.226 | | |

PARAMETRIC VALUES

| | | | | |
|--------|---|-------|--------|-------|
| ALPHAB | - | 9.977 | MACH | 3.000 |
| ALPHAT | - | 0.000 | ORBPOW | 0.000 |
| BSTPOW | - | 0.000 | | |

REFERENCE FILE

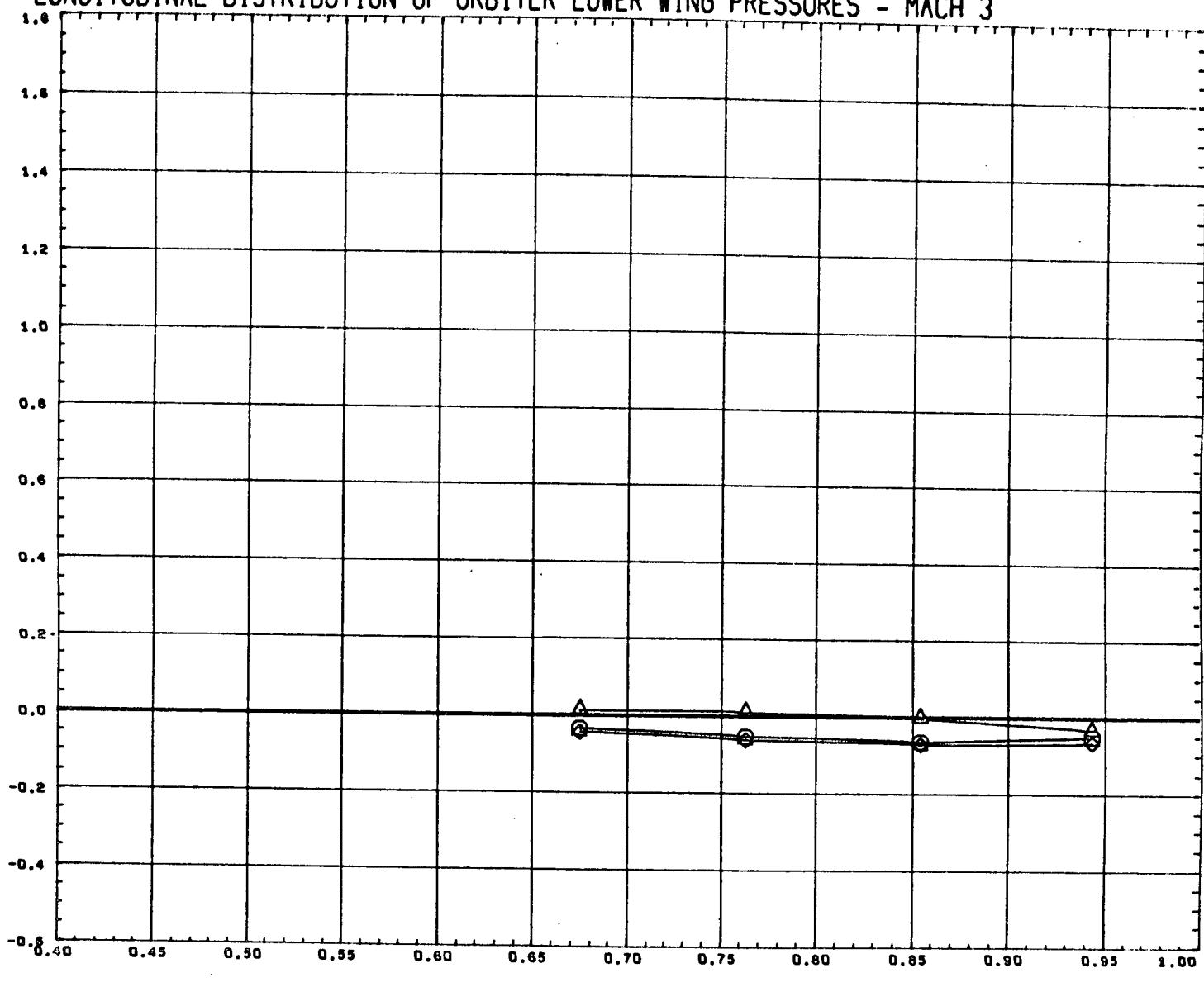
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.143 | 0.399 | 0.226 |
| △ | 0.103 | | |
| ◇ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 9.977 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

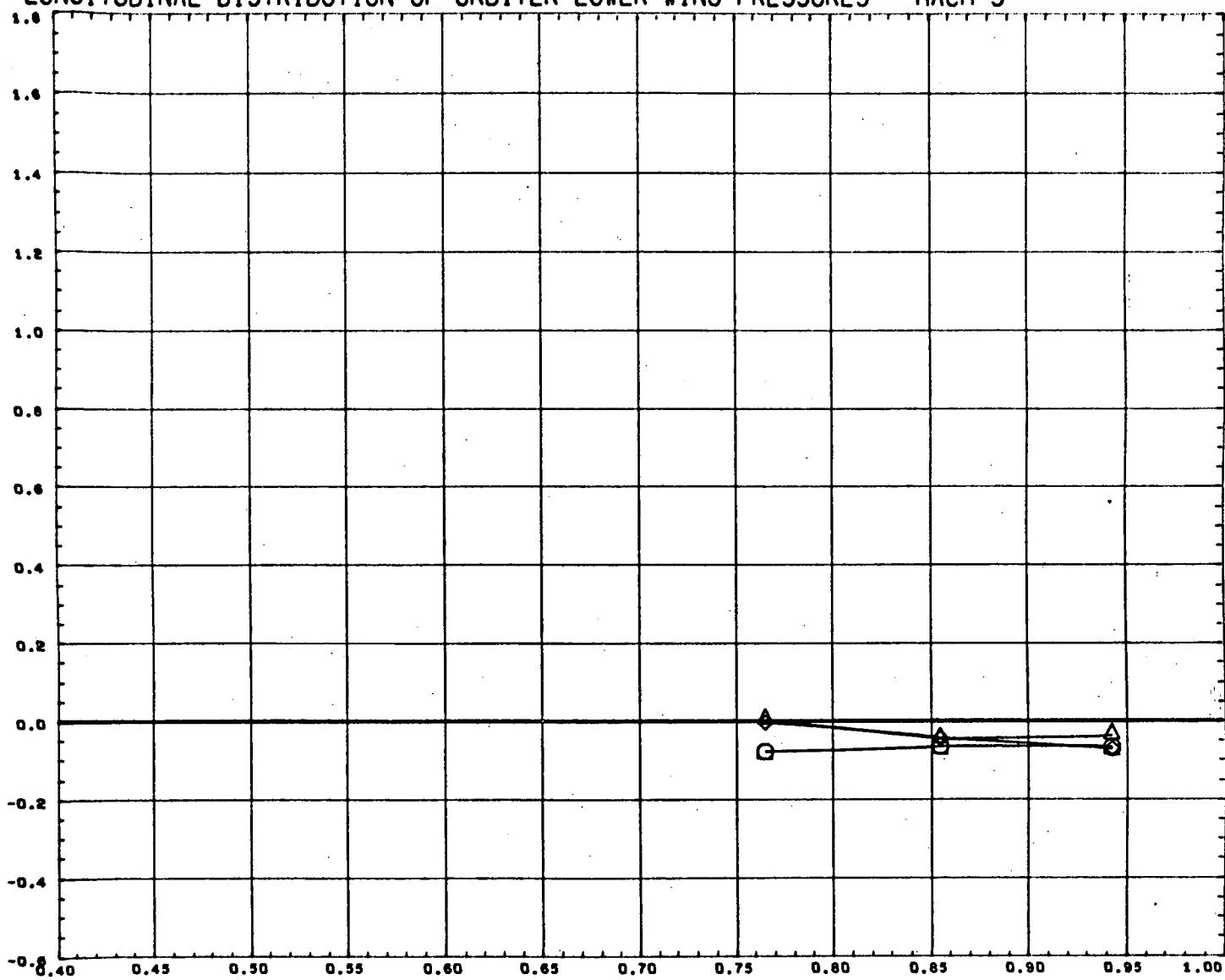
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| △ | 0.143 | 0.568 | 0.228 |
| □ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|-------|
| ALPHAB | - 9.977 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

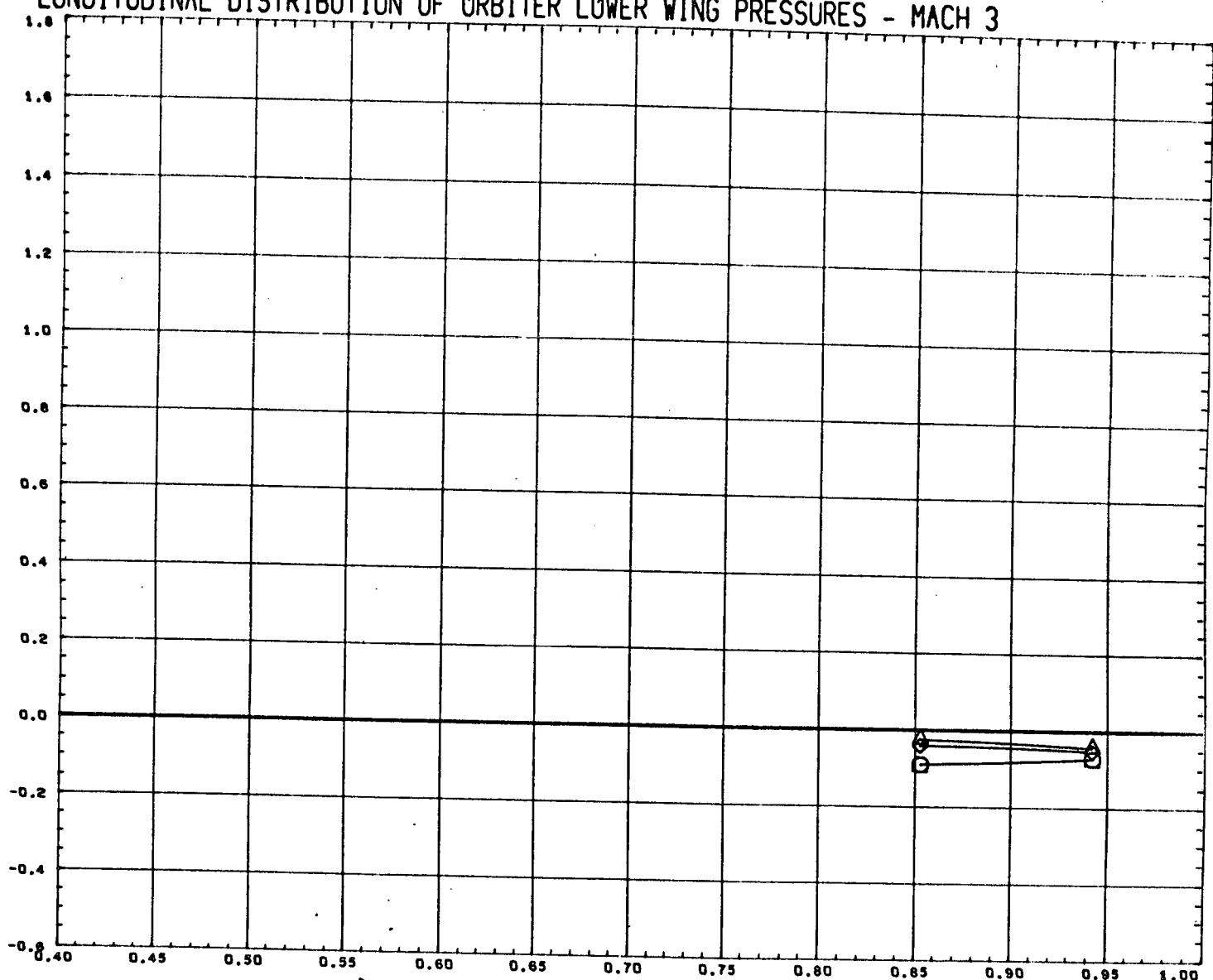
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| △ | -0.143 | 0.738 | 0.226 |
| ◊ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|-------|
| ALPHAB | -9.977 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

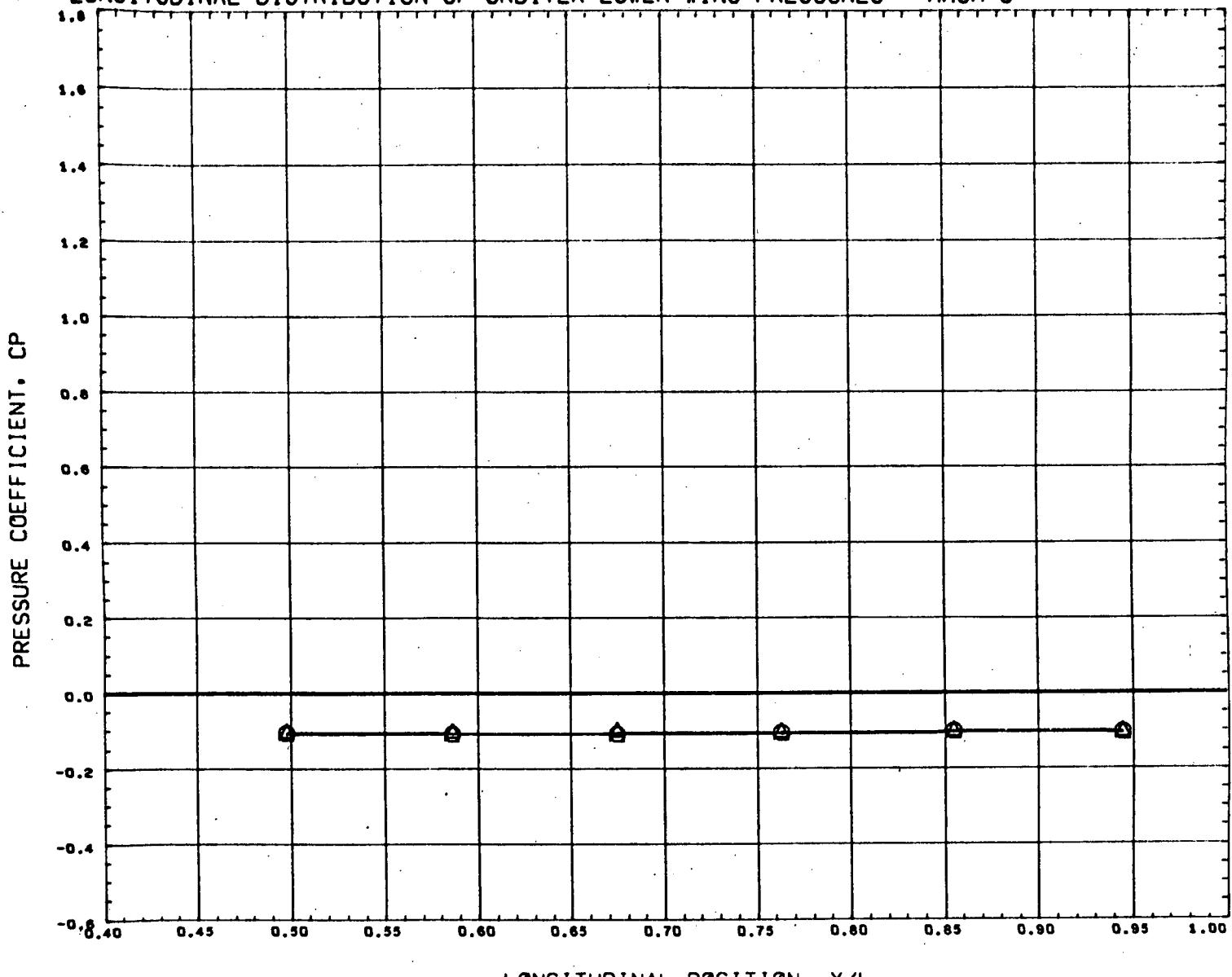
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8321•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

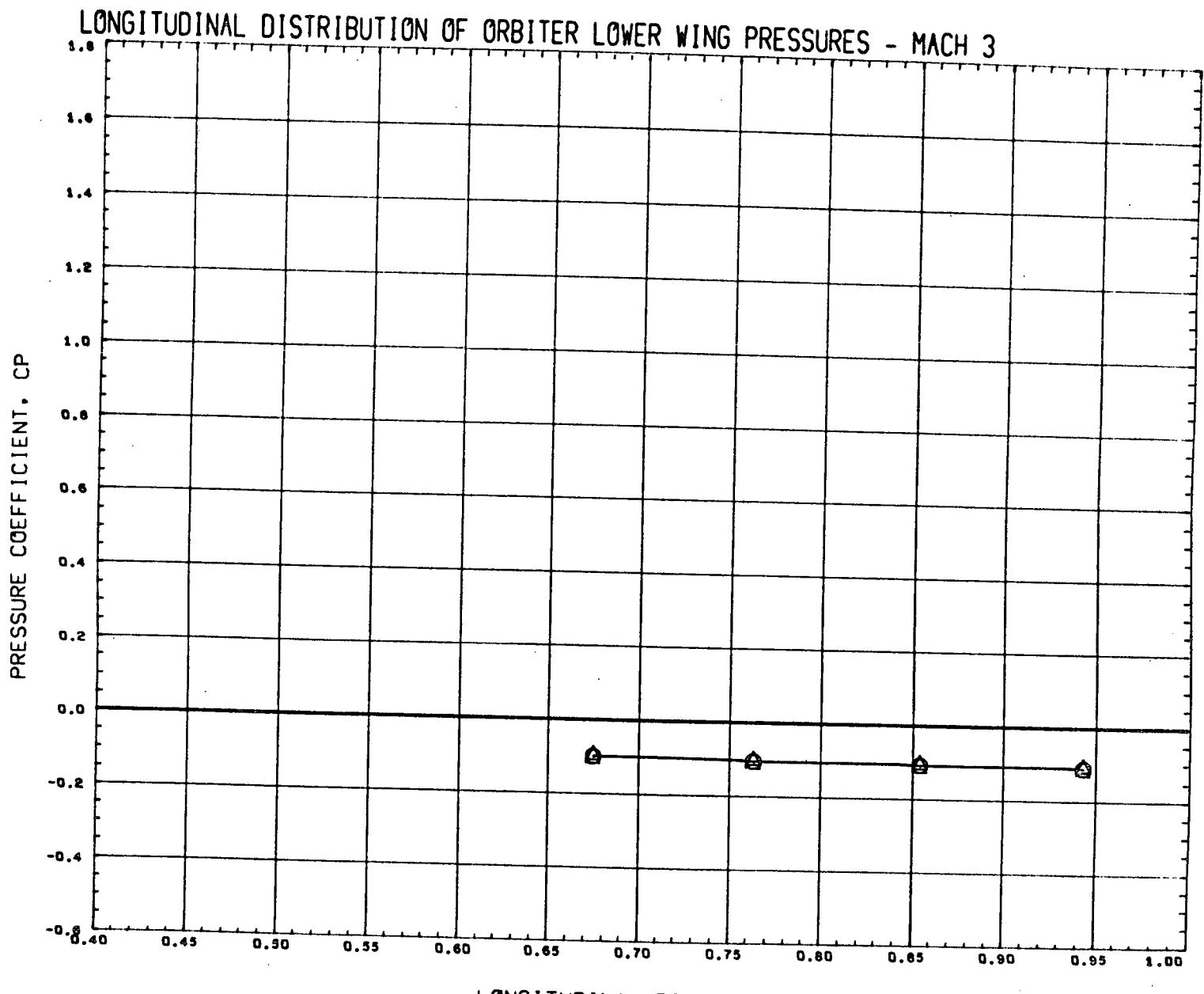


REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8321•

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SYMBOL DELTAX Y/B DELTAZ
 O - 0.391 0.399 0.908
 △ 0.516

PARAMETRIC VALUES
 ALPHAB = 9.977 MACH = 3.000
 ALPHAI = 0.000 ORBPOW = 0.000
 BSTPOW = 0.000

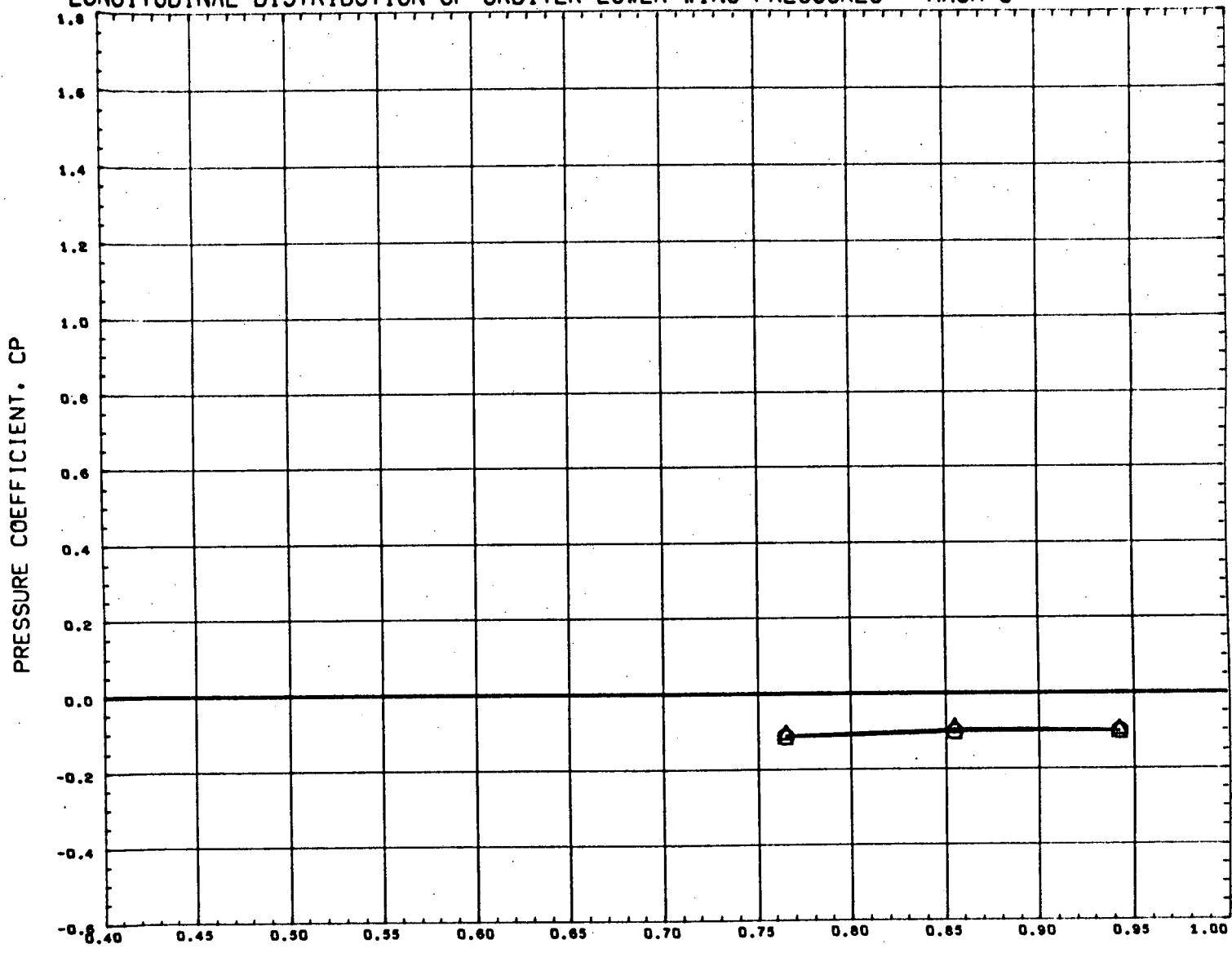
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8321•

PAGE 274

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

Δ - 0.391 0.568 0.908
 0.516

| | PARAMETRIC VALUES | | |
|--------|-------------------|--------|-------|
| ALPHAB | - 9.977 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

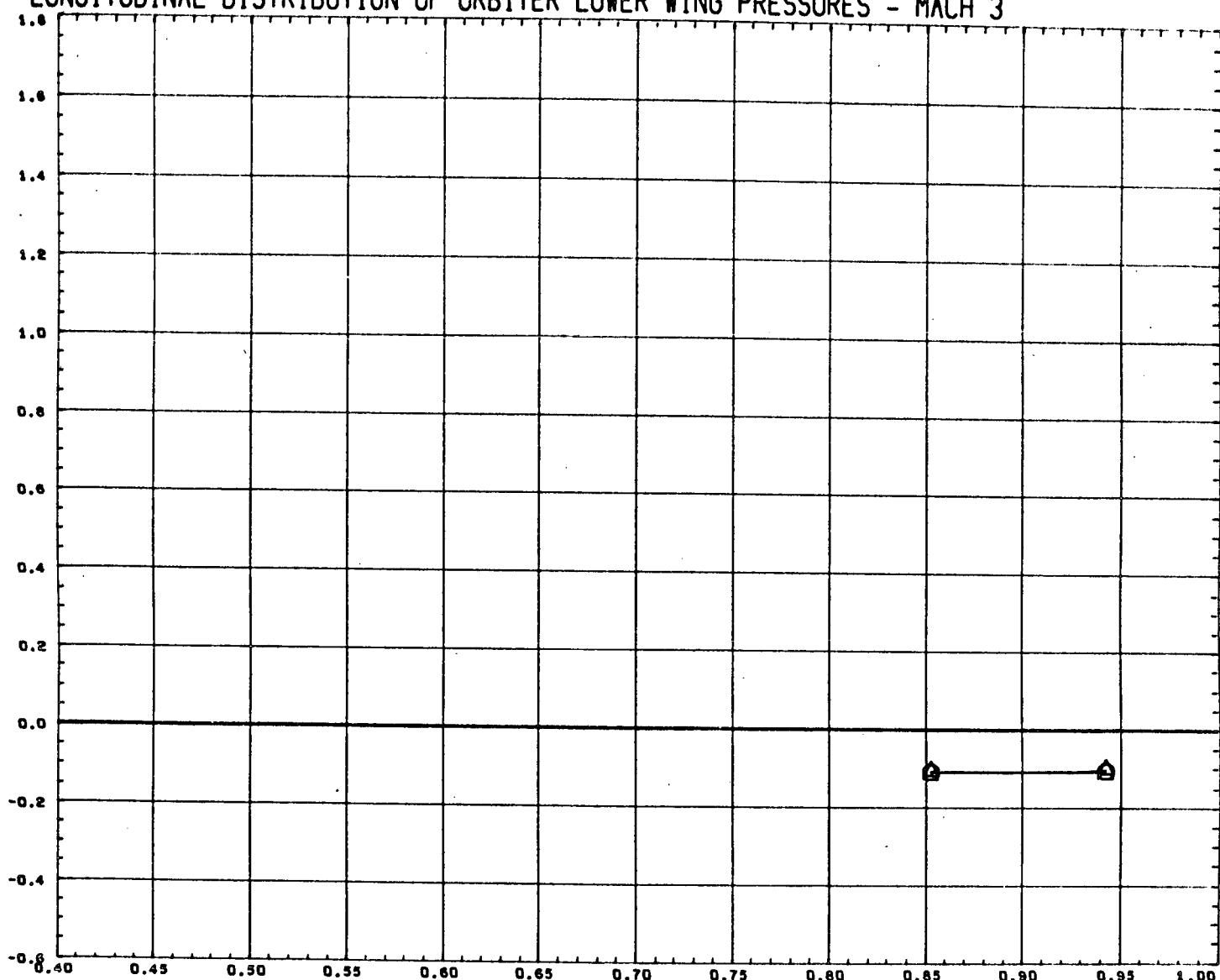
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8321•

PAGE 275

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

SYMBOL DELTAX Y/B DELTAZ
 □ - 0.391 0.738 0.908
 △ 0.516

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|-------|
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

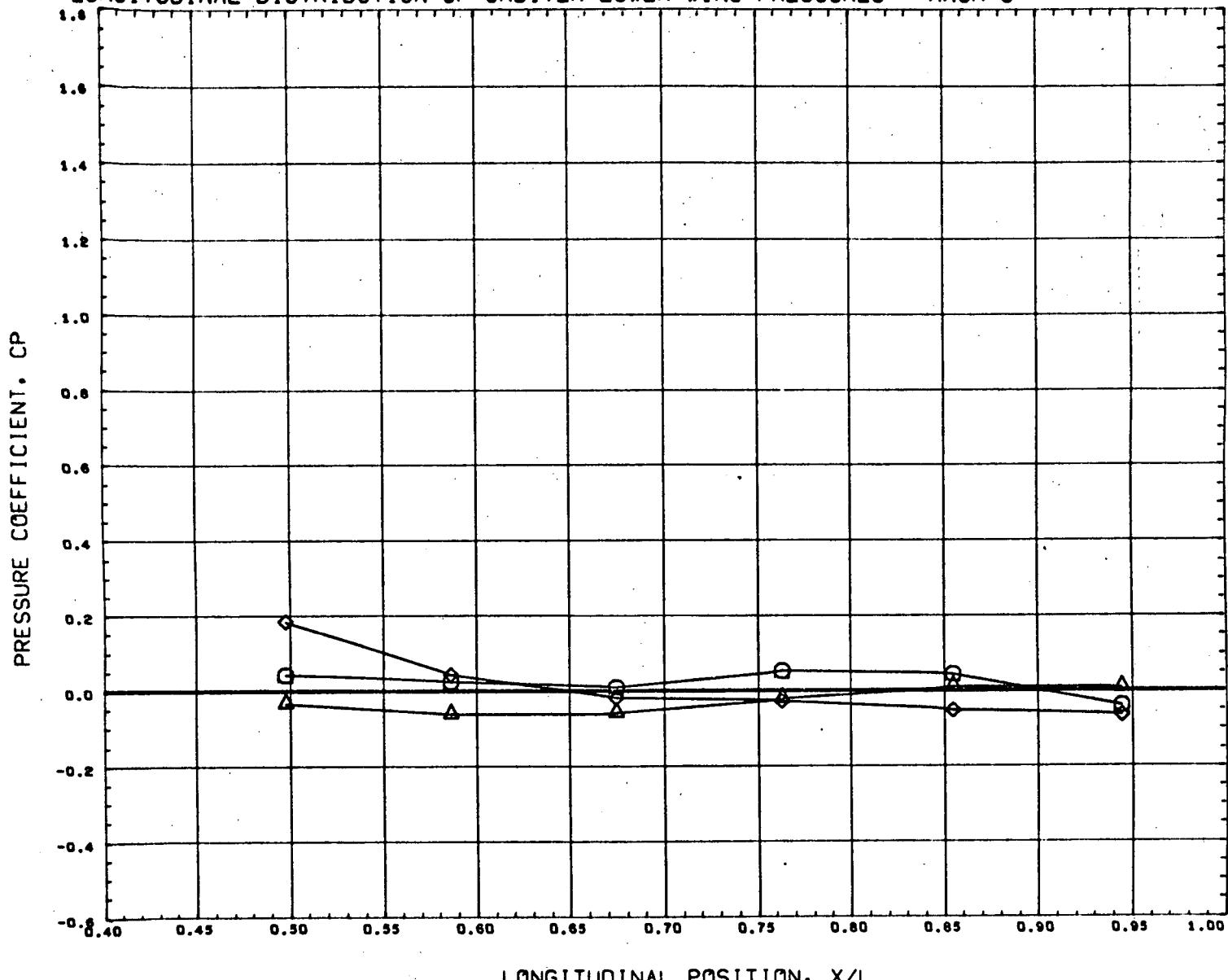
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8321•

PAGE 276

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 0.230 | 0.120 |
| △ | - 0.103 | | |
| ◊ | - 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|-------|
| ALPHAB | - 4.939 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

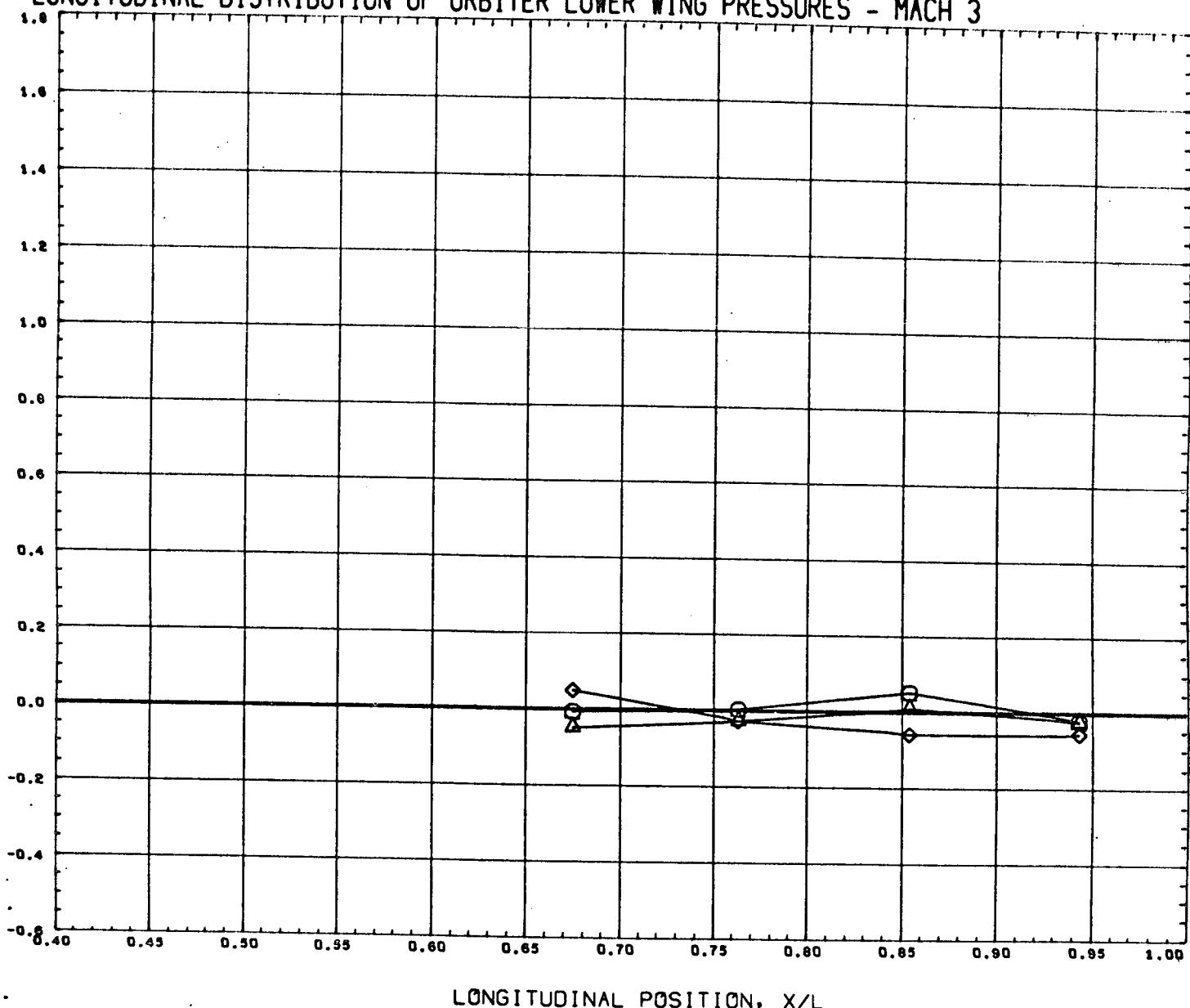
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8322•

PAGE 277

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

- - 0.143 0.399 0.120
- △ 0.103
- ◊ 0.226

PARAMETRIC VALUES

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|-------|
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

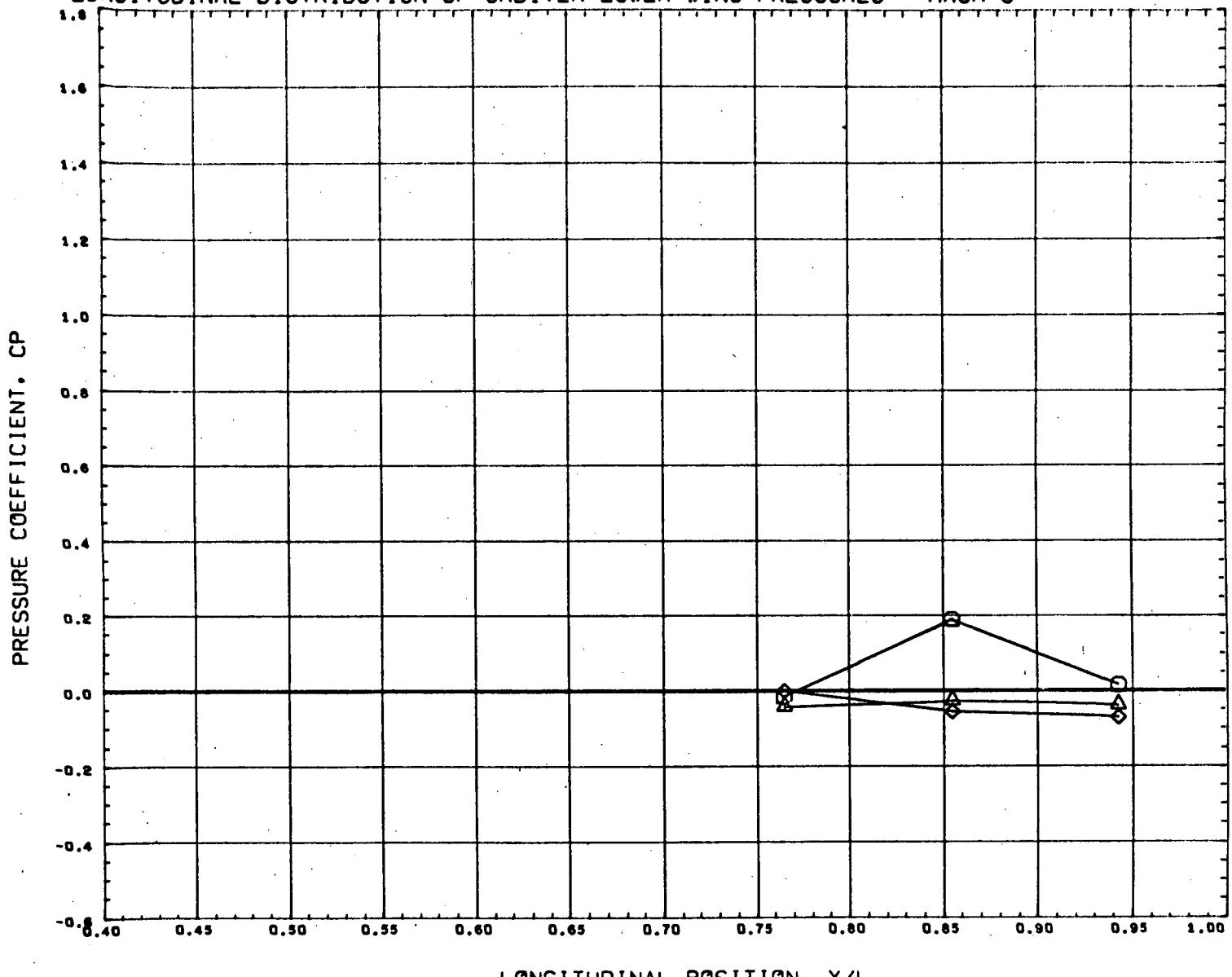
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8322•

PAGE 278

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



| PARAMETRIC VALUES | | |
|-------------------|--------|--------------|
| ALPHAB | -4.939 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

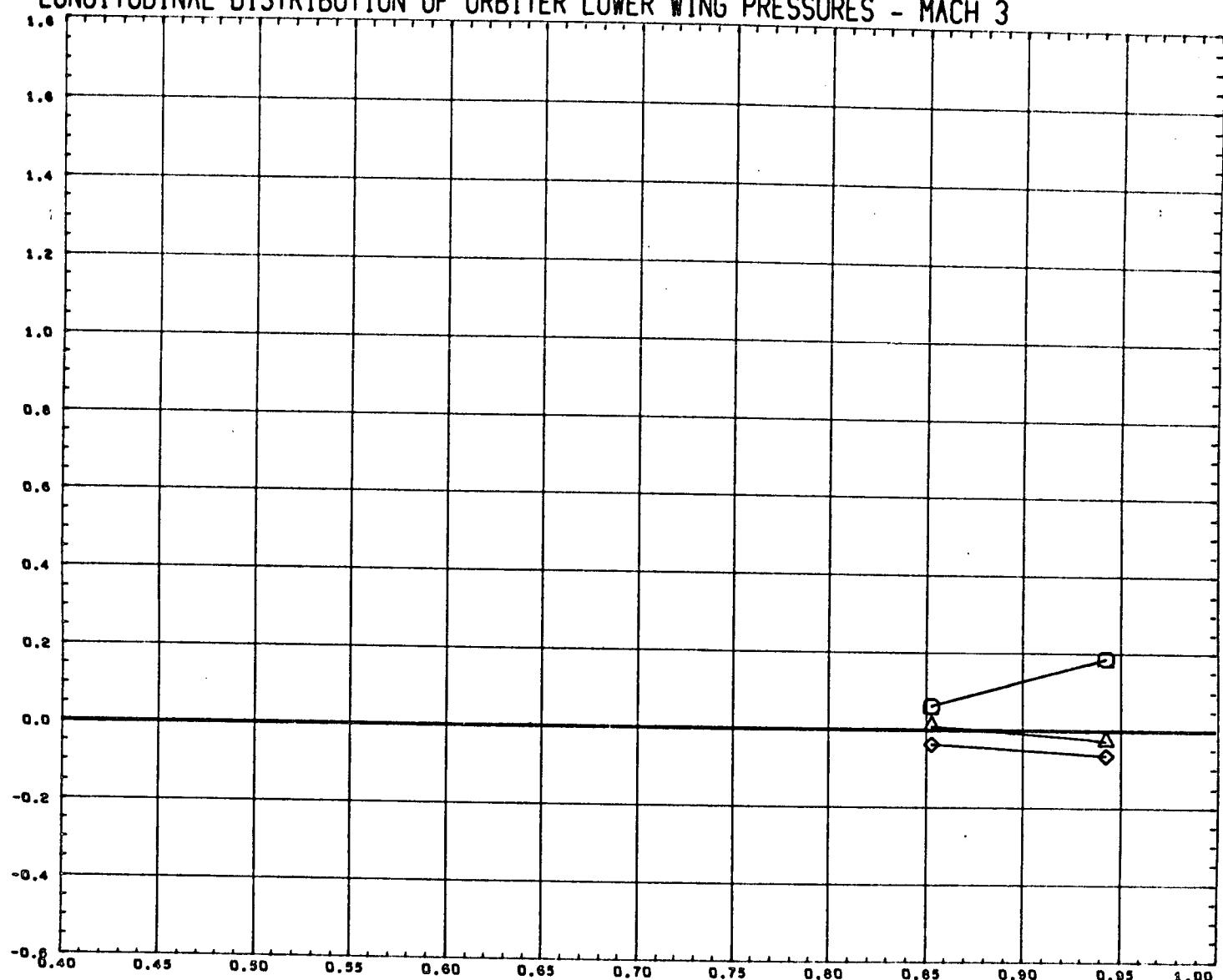
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8322•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 0.738 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

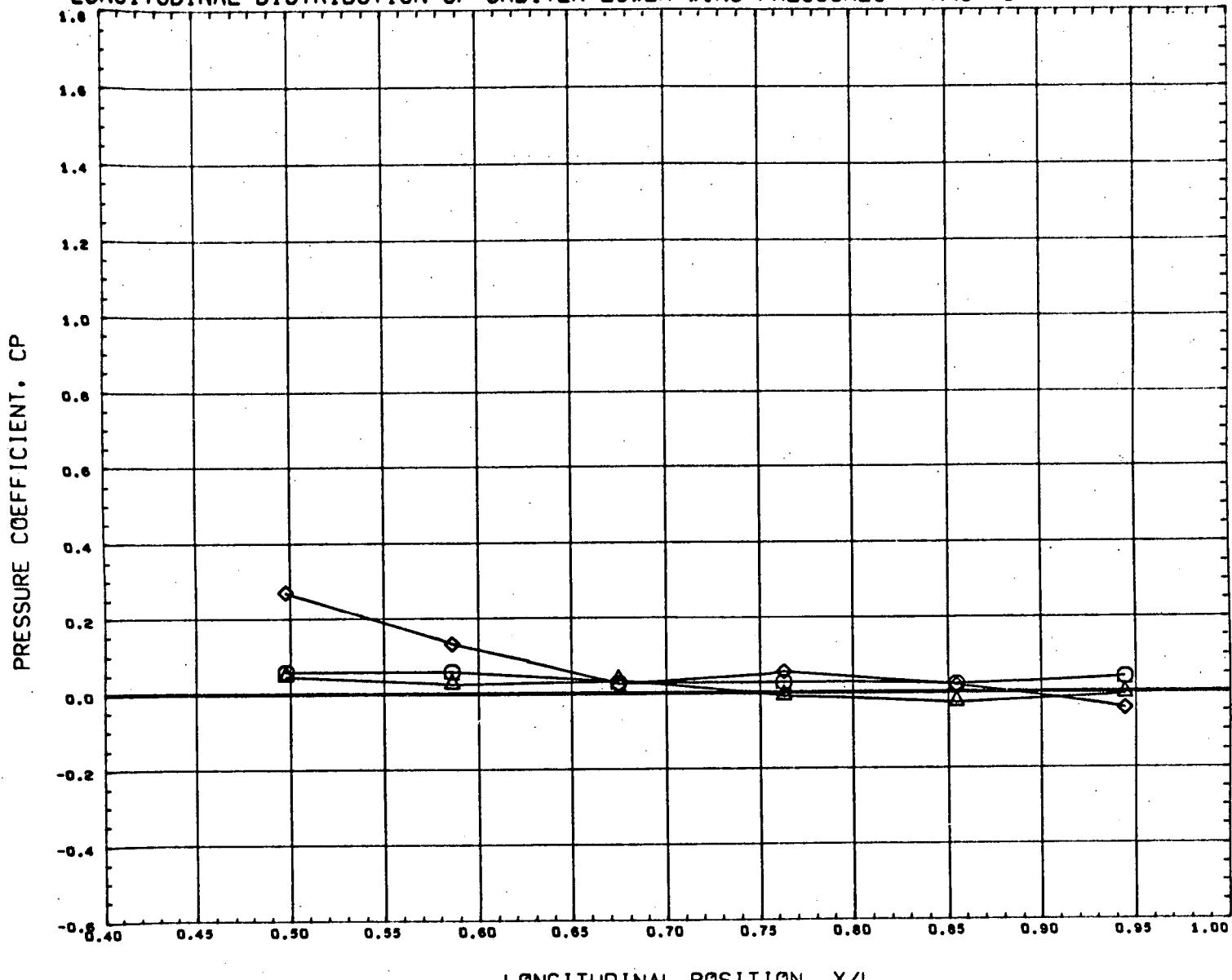
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8322•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 □ - 0.144 0.230 0.151
 ▲ 0.101 0.226
 ◇ 0.000

PARAMETRIC VALUES
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 ALPHAI = 0.000 ORBPOW = 0.000
 BSTPOW = 0.000

REFERENCE FILE

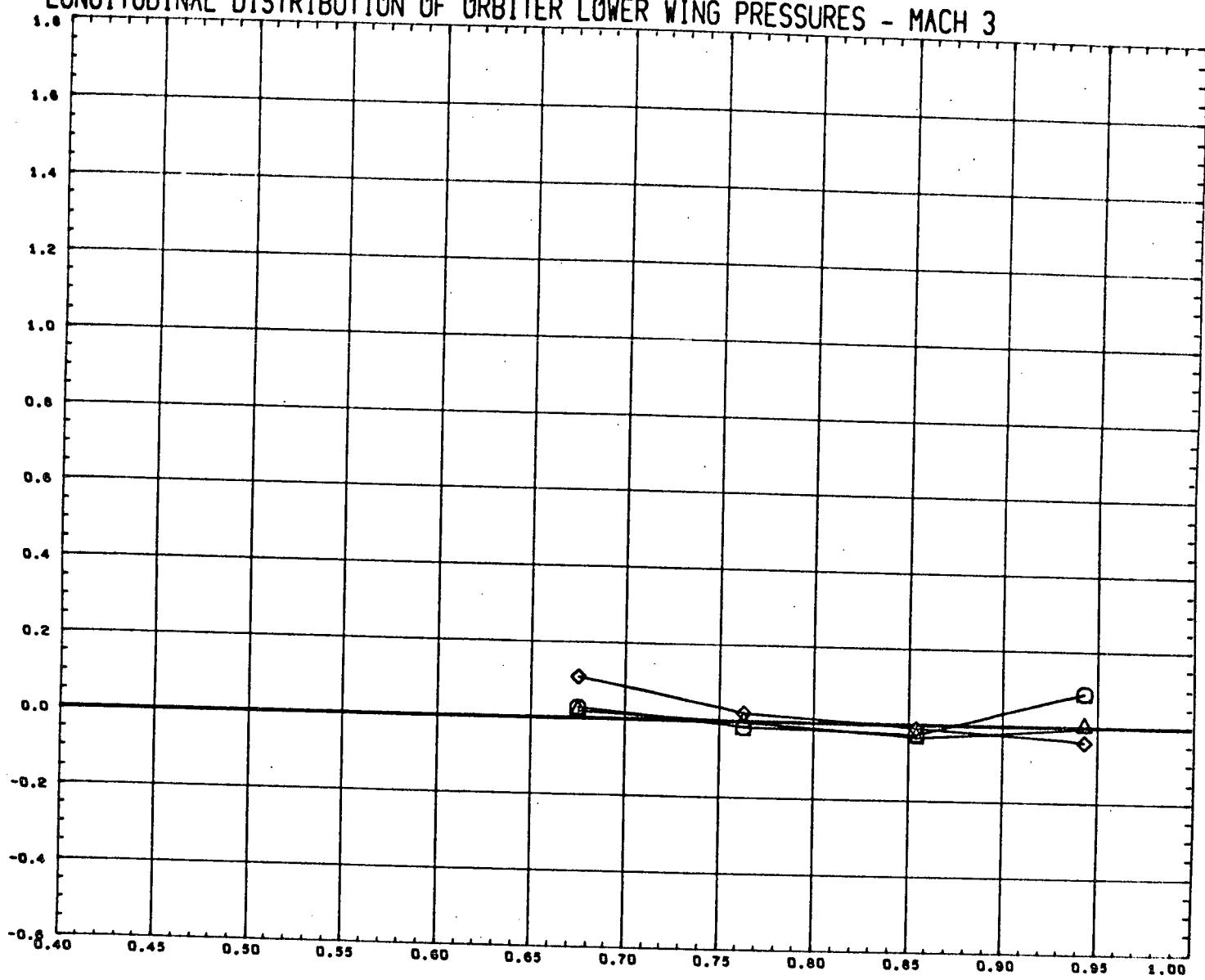
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8322•

PAGE 281

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX Y/B DELTAZ
 △ - 0.144 0.399 0.151
 ○ 0.101
 ◇ 0.226

LONGITUDINAL POSITION. X/L

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 4.939 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

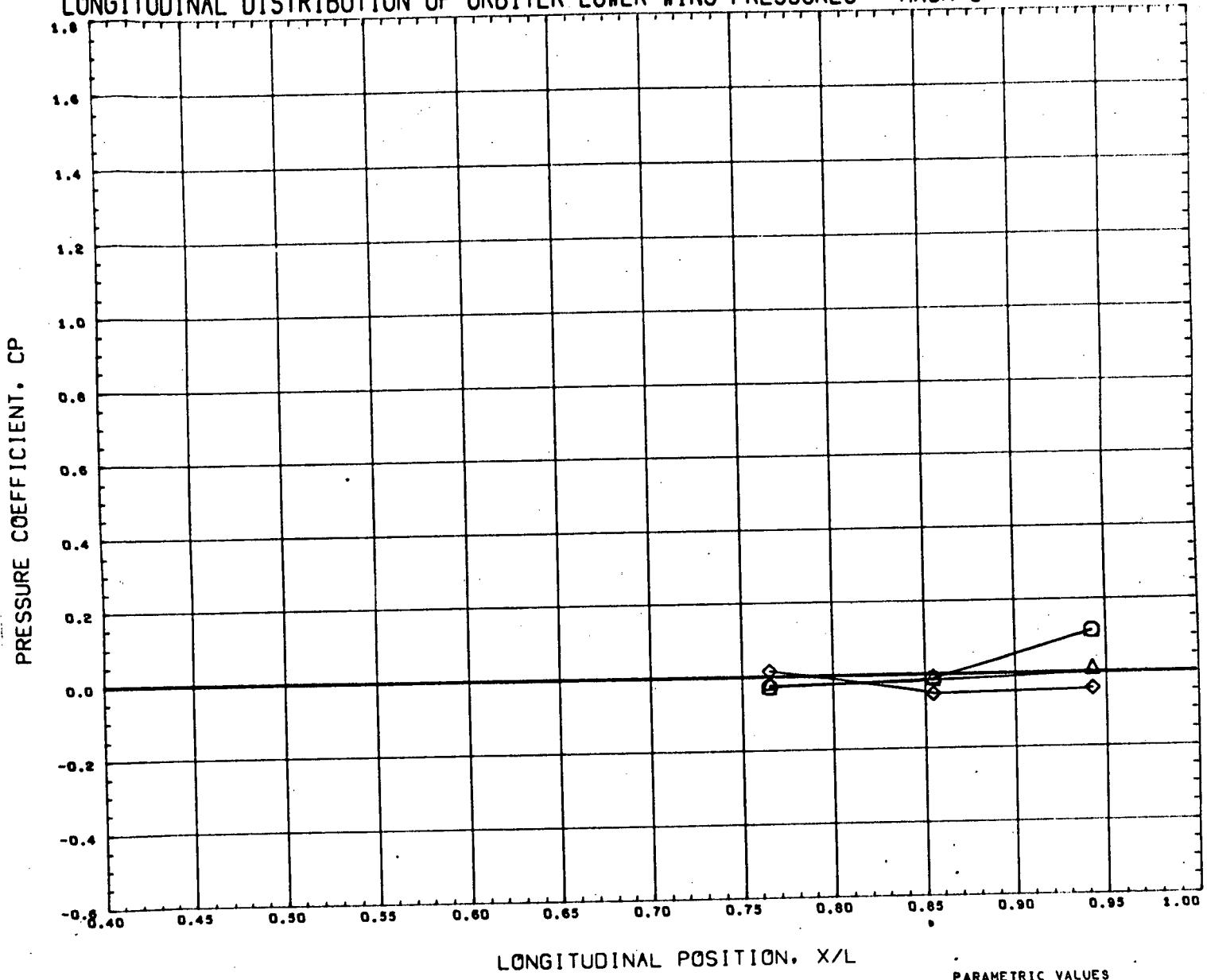
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8322•

PAGE 282

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 △ - 0.144 0.568 0.151
 ○ 0.101 0.226
 ◇ 0.226

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
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| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

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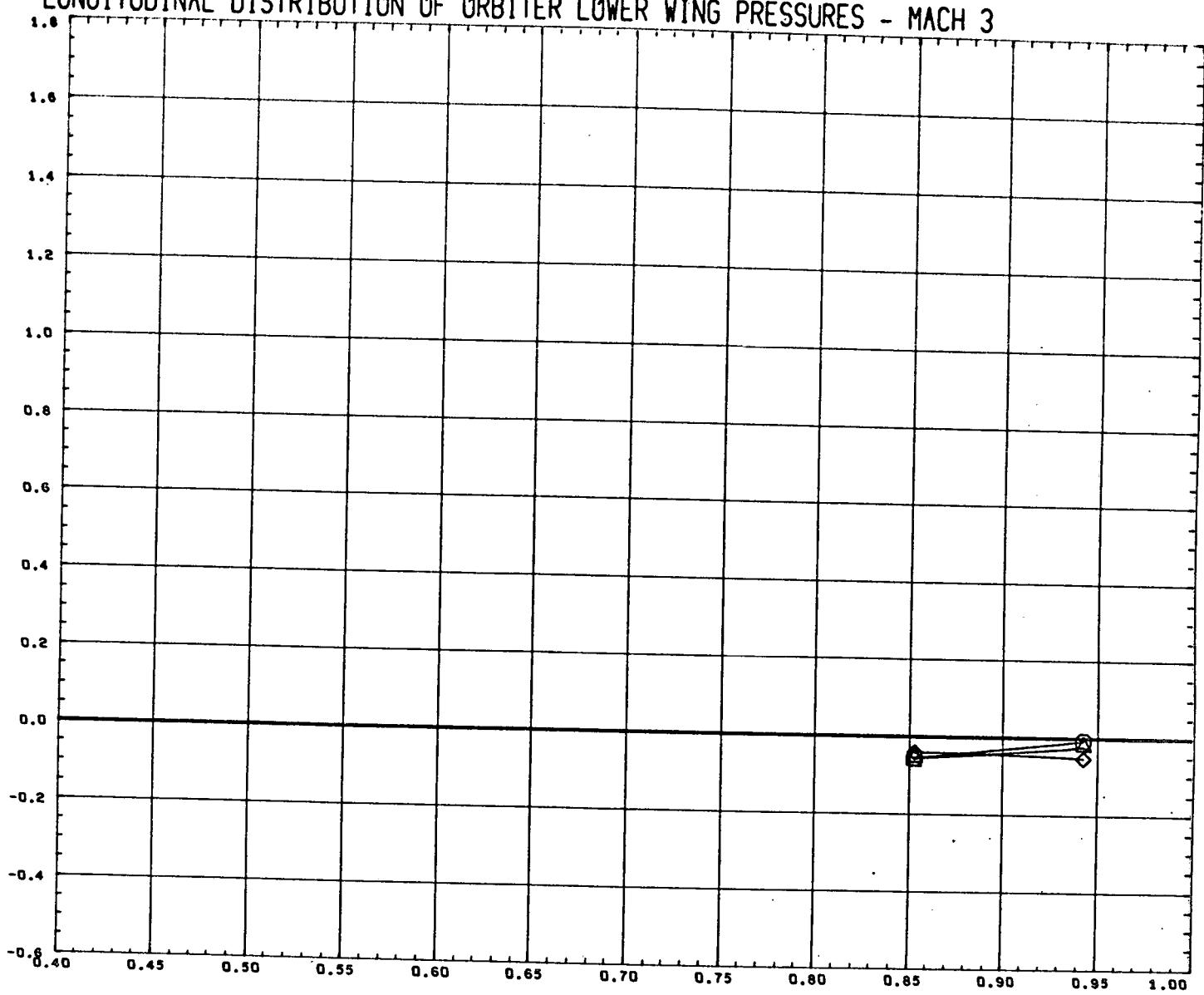
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8322•

PAGE 283

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| - | 0.144 | 0.738 | 0.151 |
| △ | 0.101 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 4.939 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

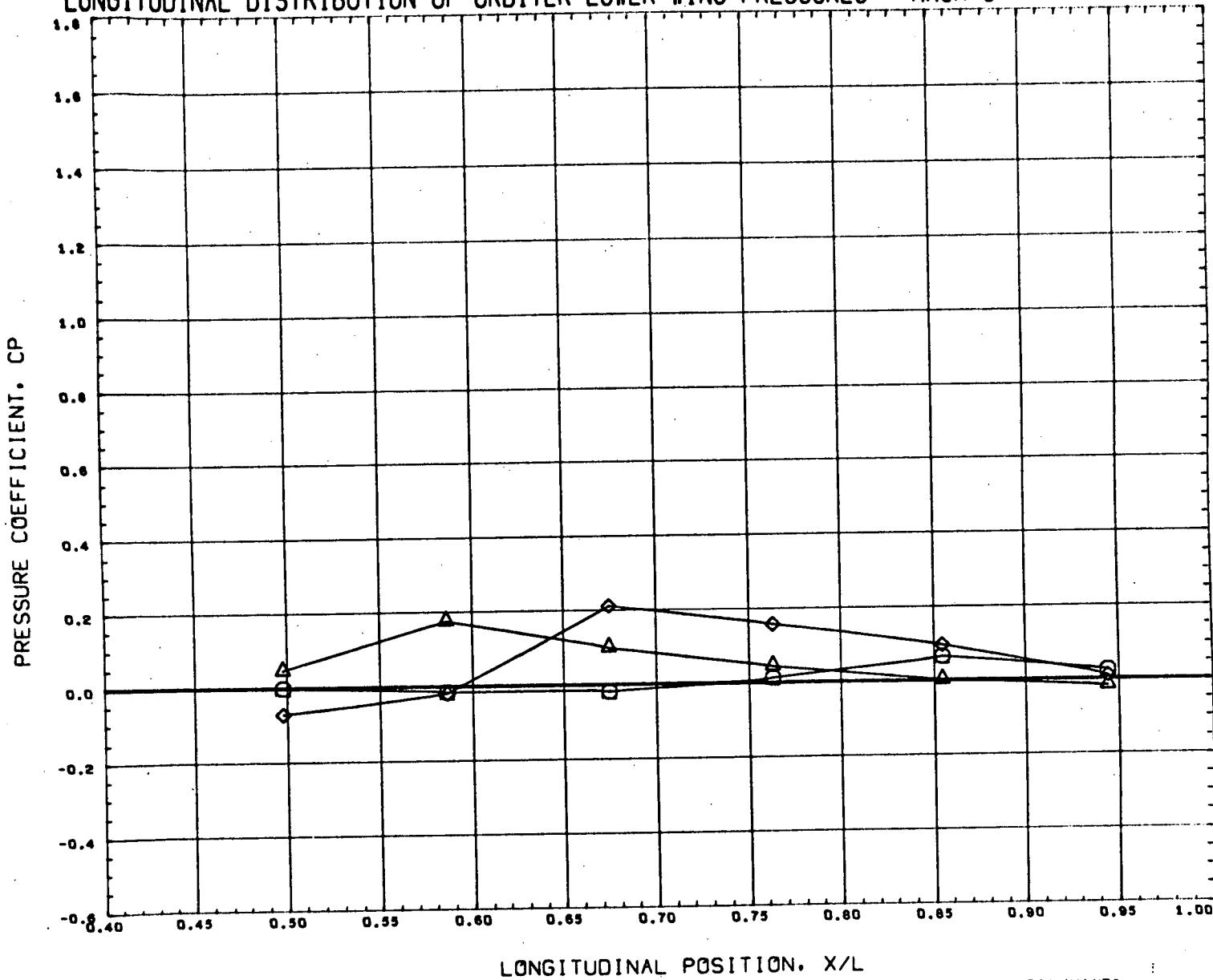
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AEDC VA1163 MDAC ORBITER (LOWER WING)

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 ○ - 0.143 0.230 0.228
 △ - 0.104 0.230 0.228
 ◇ - 0.227 0.230 0.228

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

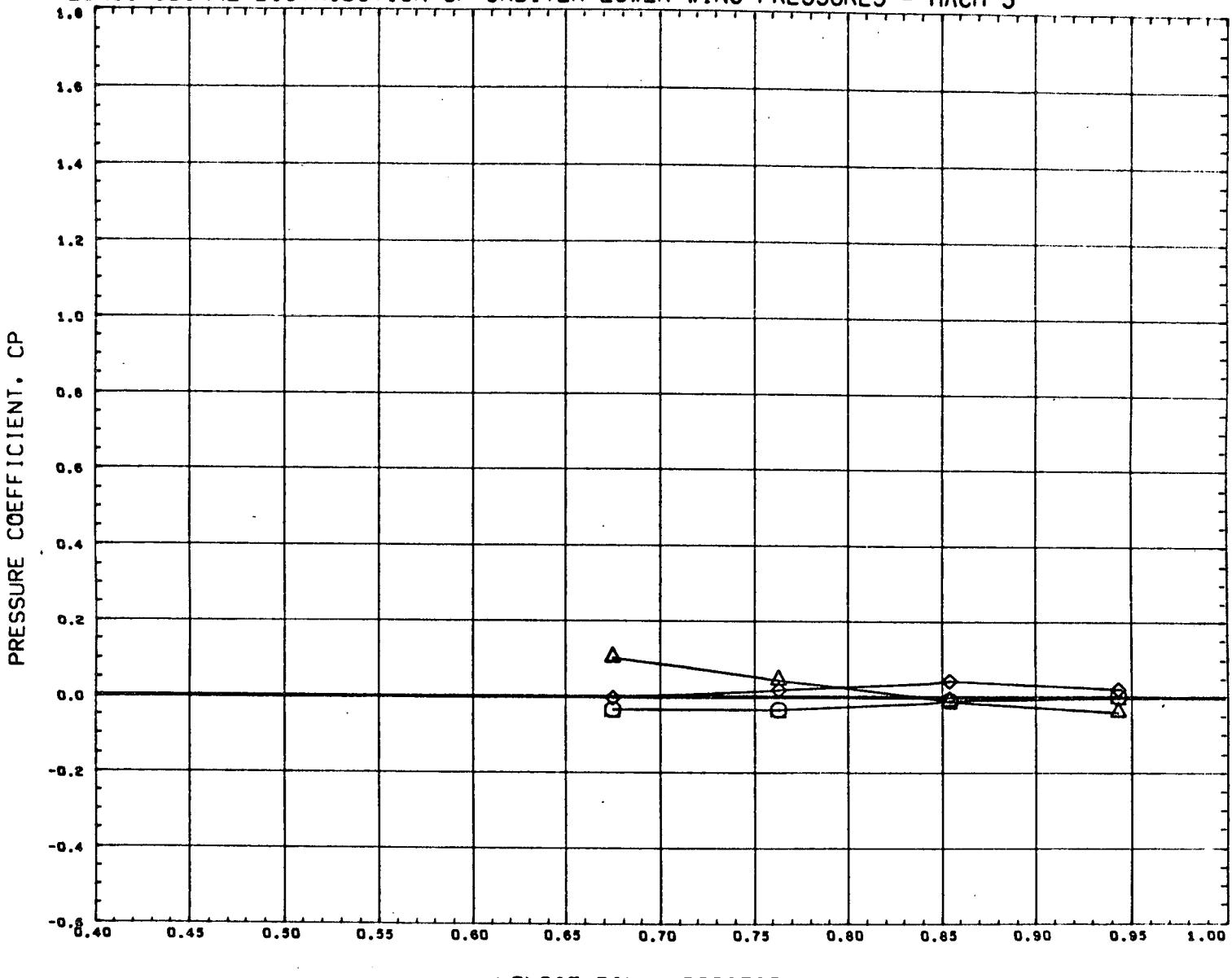
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AEDC VA1163 MDAC ORBITER (LOWER WING)

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

○ - 0.143 0.399 0.226
 0.104
 0.227

PARAMETRIC VALUES

| | | | | |
|--------|---|-------|--------|-------|
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| ALPHAI | | 0.000 | ORBPOW | 0.000 |
| BSTPOW | | 0.000 | | |

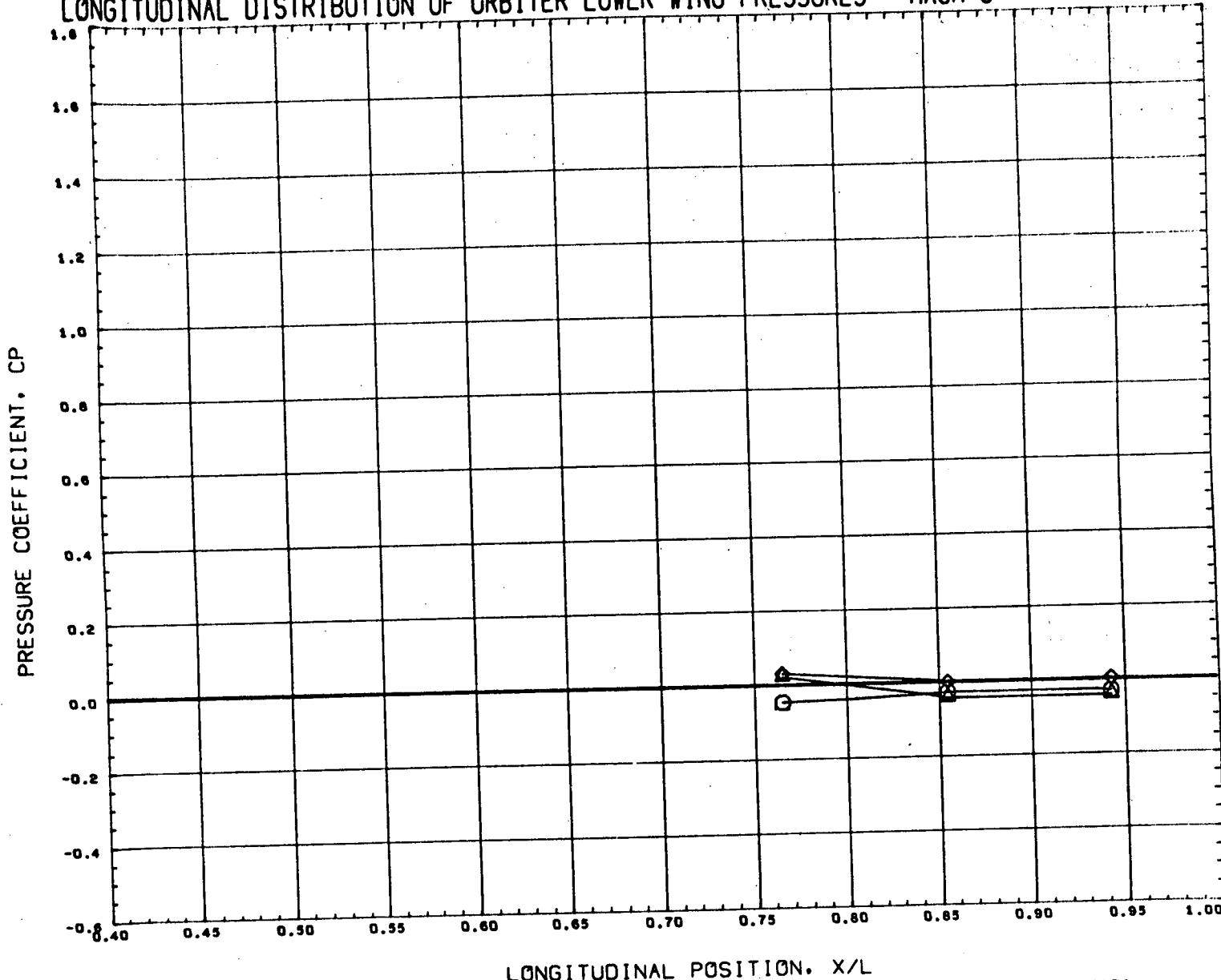
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8322•

PAGE 286

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 4.939 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

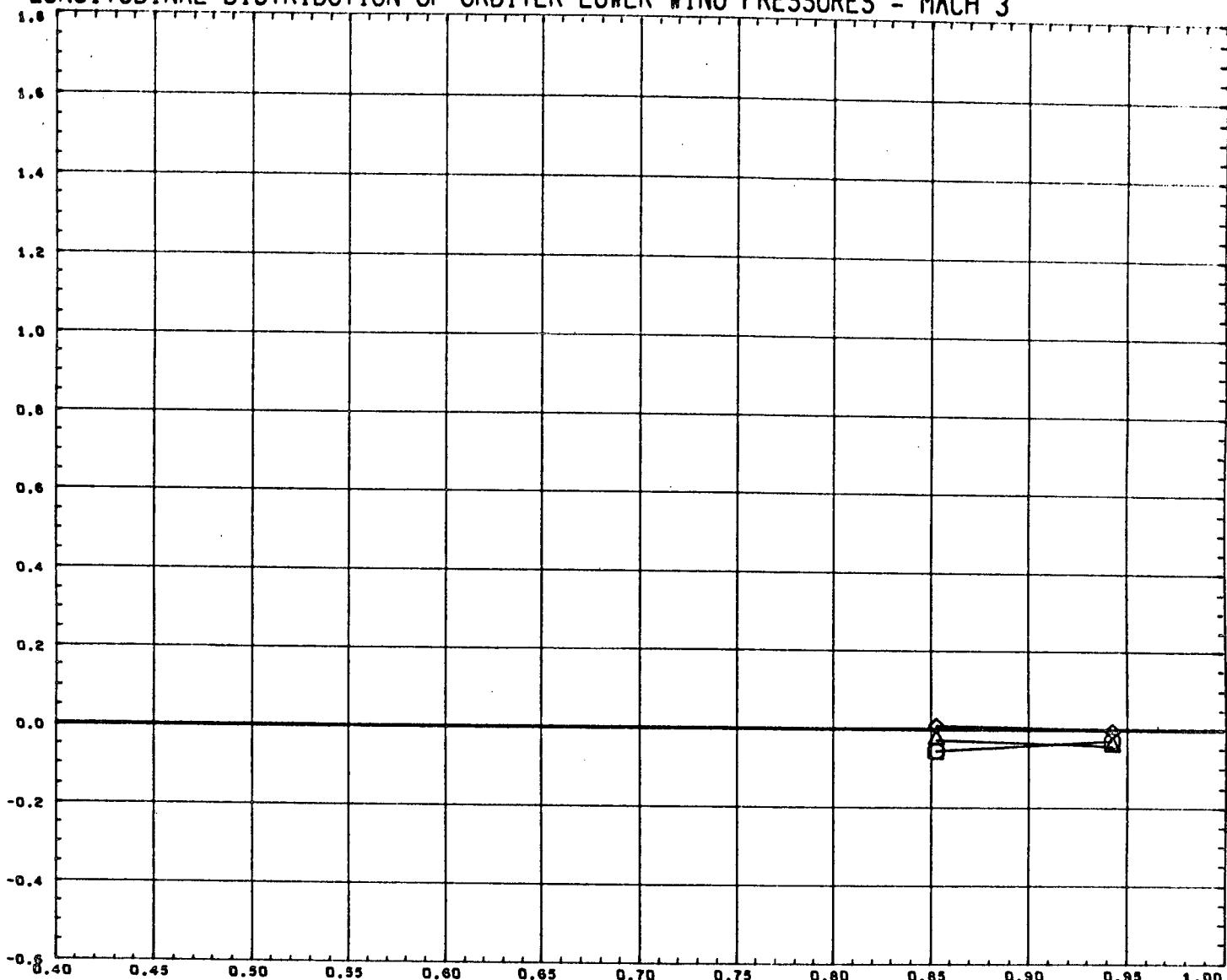
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8322•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| O | - 0.143 | 0.738 | 0.228 |
| △ | 0.104 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|-------|
| ALPHAB | - 4.939 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

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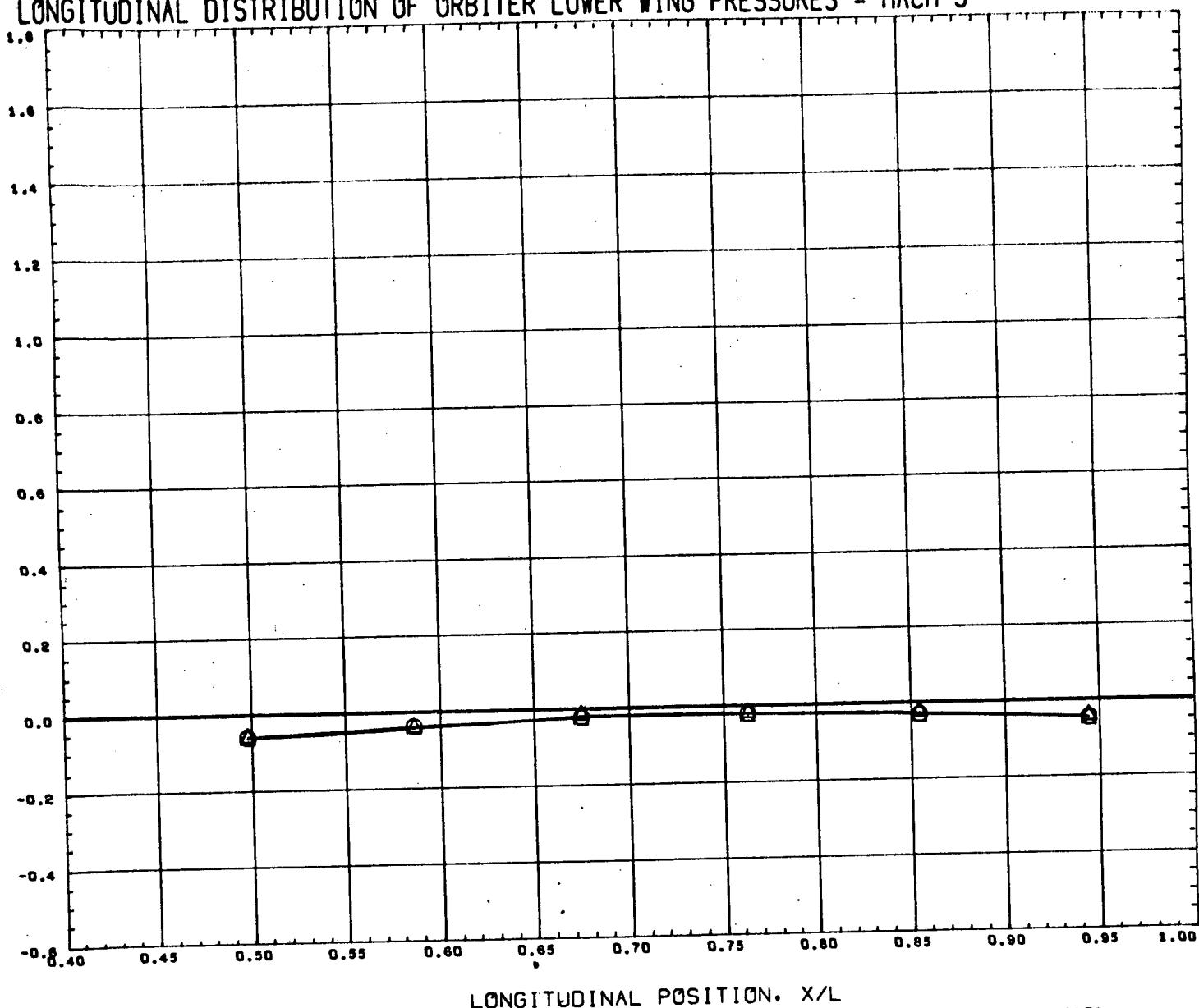
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8322•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| O | - 0.391 | 0.230 | 0.908 |
| | - 0.516 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
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| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

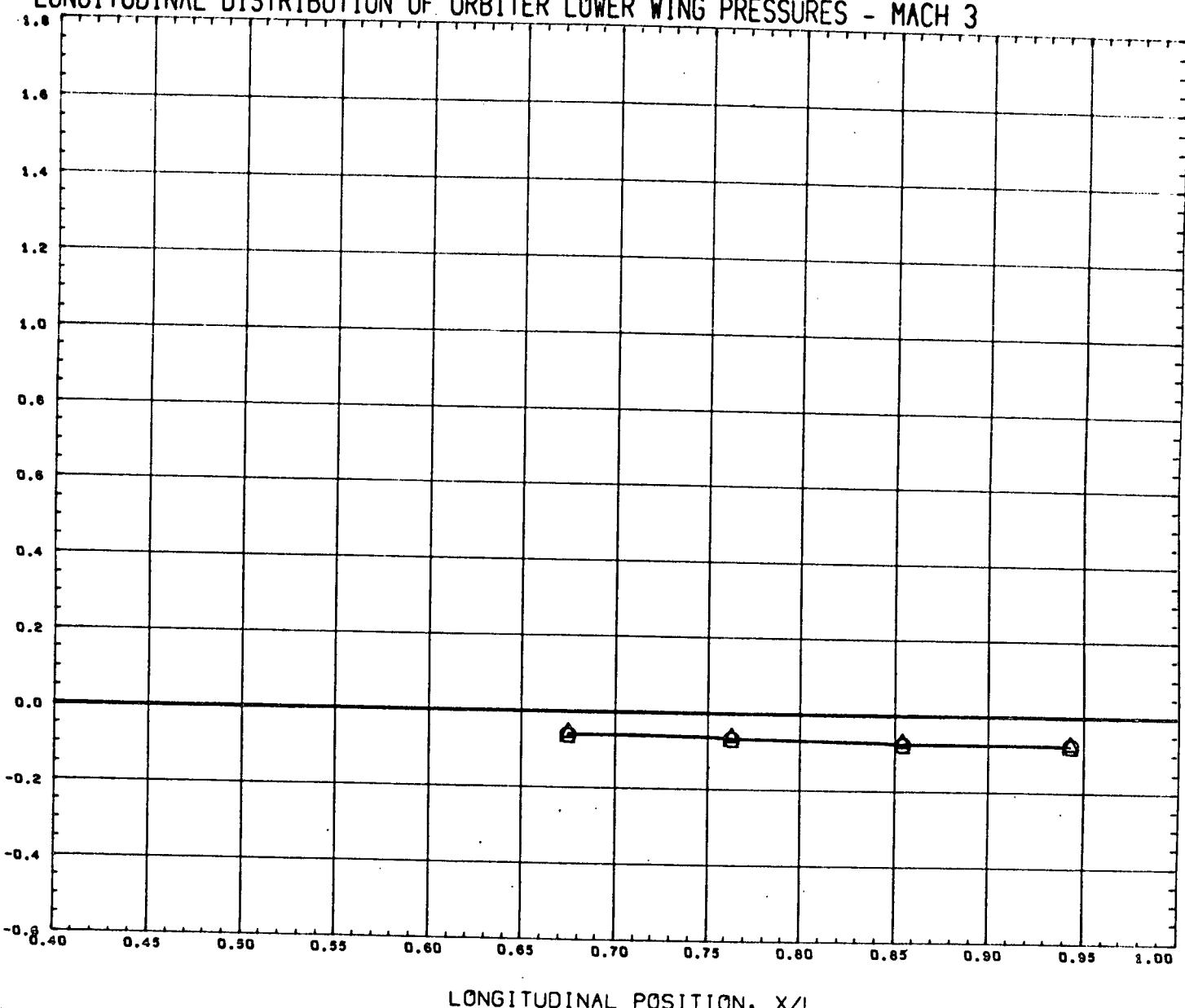
AEDC VA1163 MDAC ORBITER (LOWER WING)

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

SYMBOL DELTAX Y/B DELTAZ
 O - 0.391 0.399 0.908
 △ 0.316

PARAMETRIC VALUES
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 ALPHA1 0.000 ORBPOW 0.000
 BSTPOW 0.000

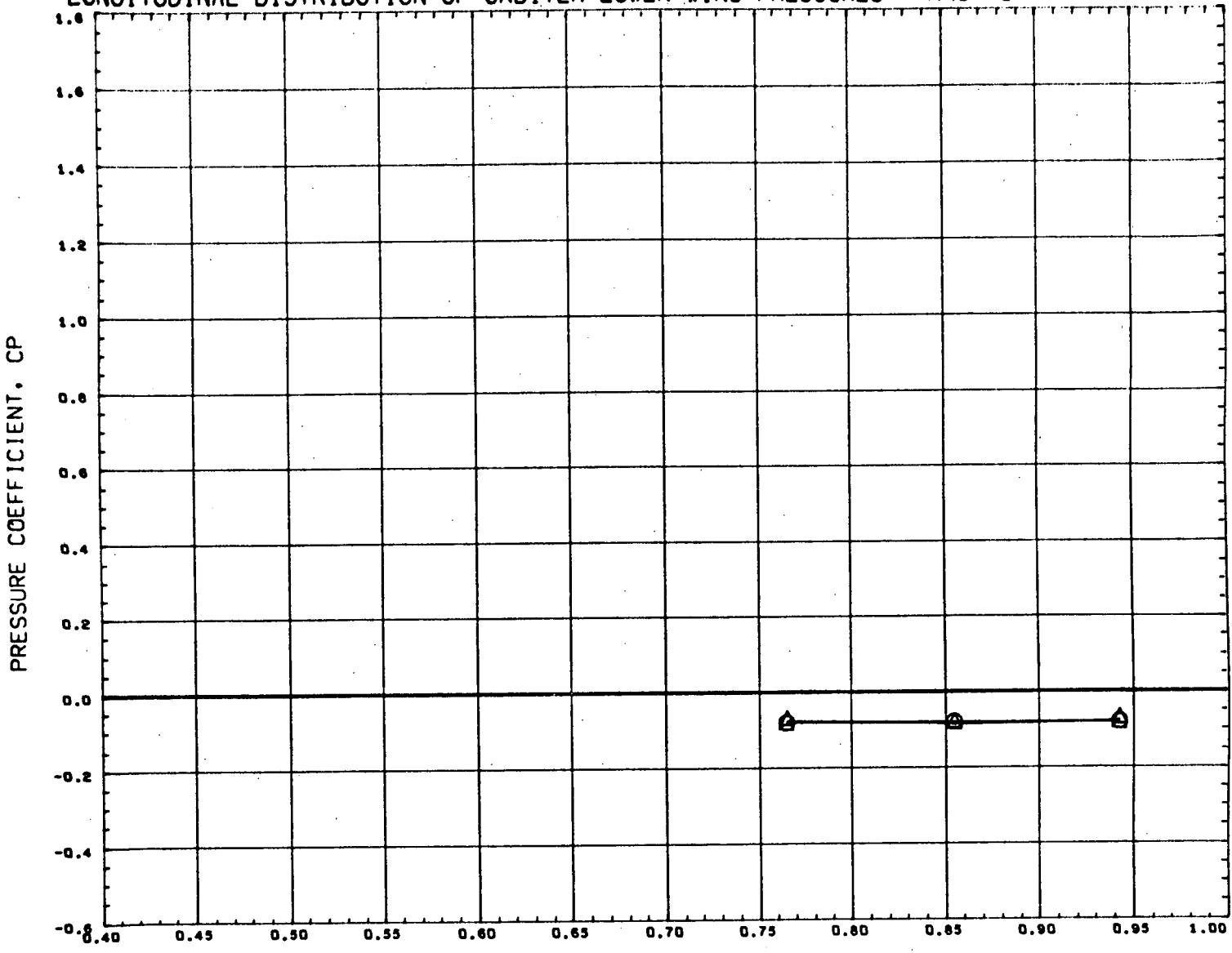
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AEDC VA1163 MDAC ORBITER (LOWER WING)

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

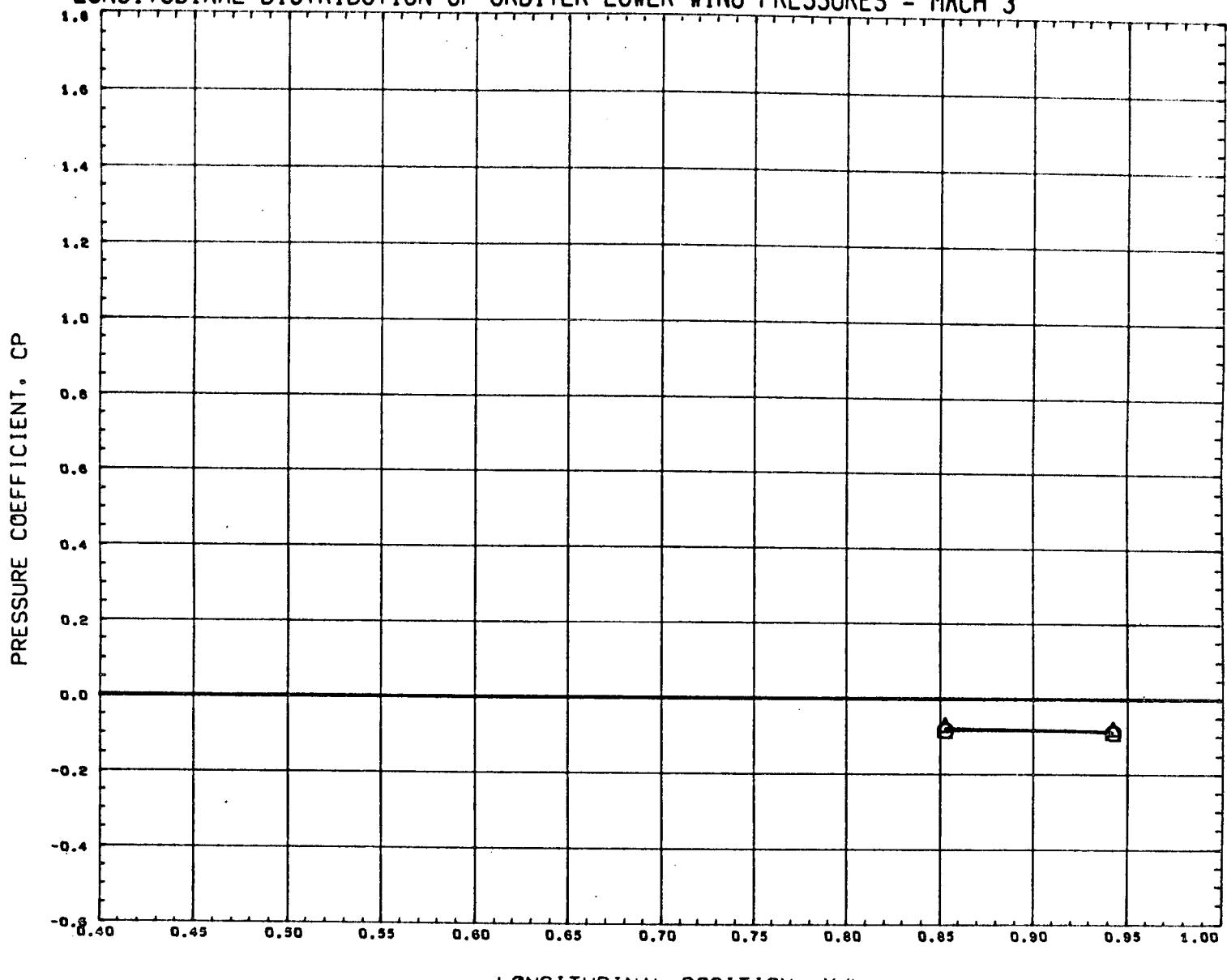


REFERENCE FILE
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8322•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| O | - 0.391 | 0.736 | 0.908 |
| △ | 0.516 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
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| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

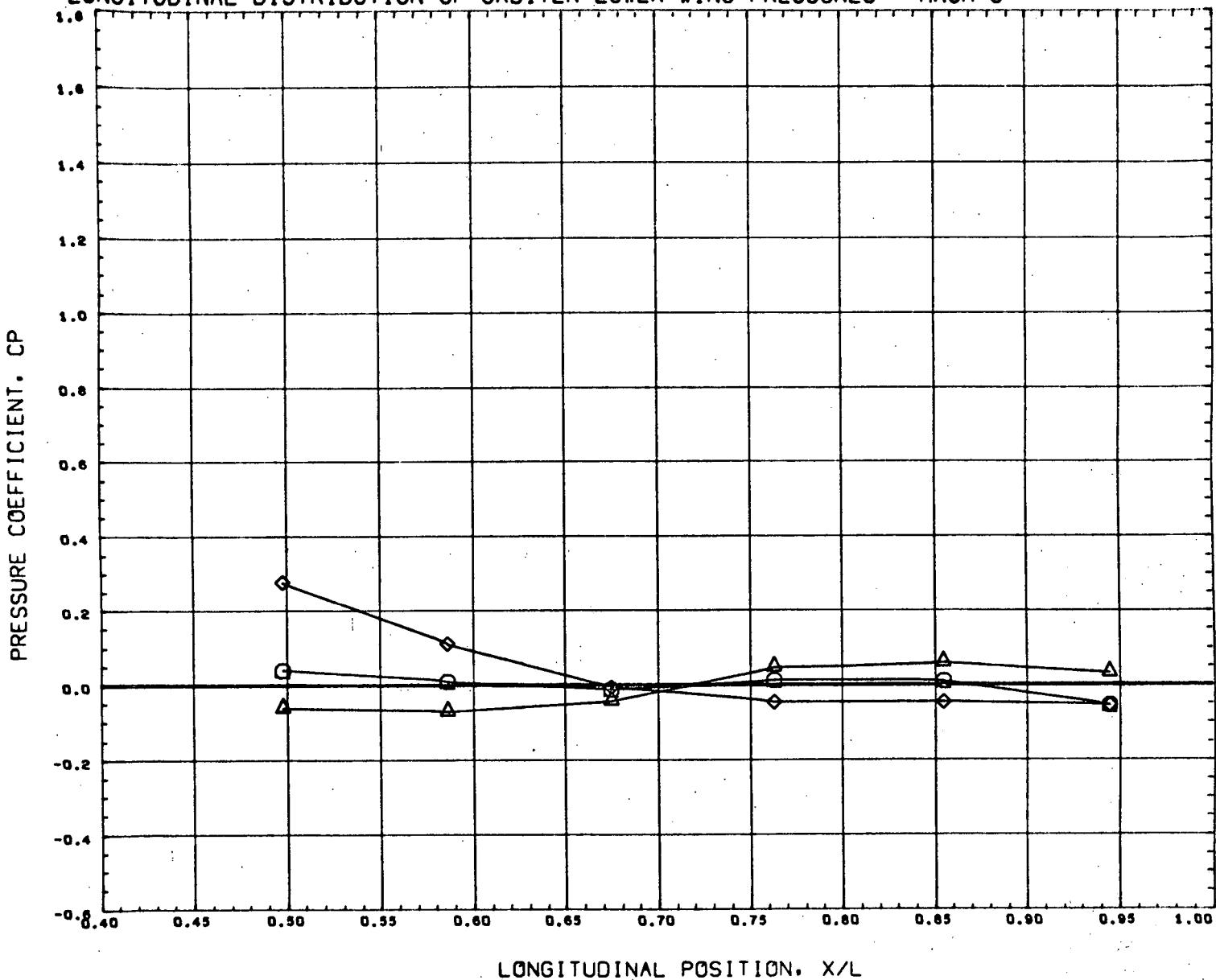
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8322•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O - 0.143 0.230 0.120
 △ 0.103
 D 0.226

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|-------|--------------|
| ALPHAB | 0.019 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

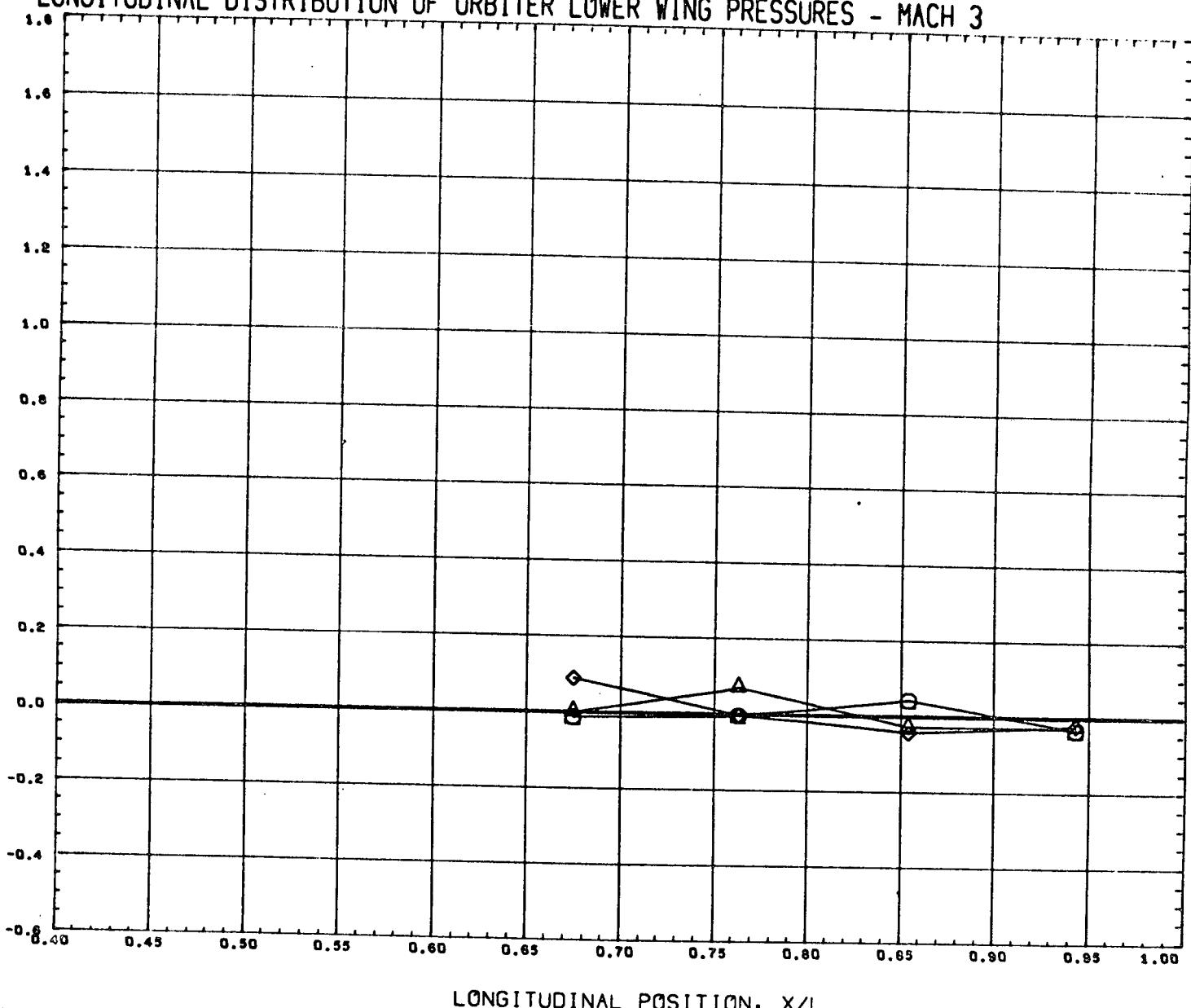
AEDC VA1163 MDAC ORBITER (LOWER WING)

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 0.399 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|-------|--------------|
| ALPHAB | 0.019 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

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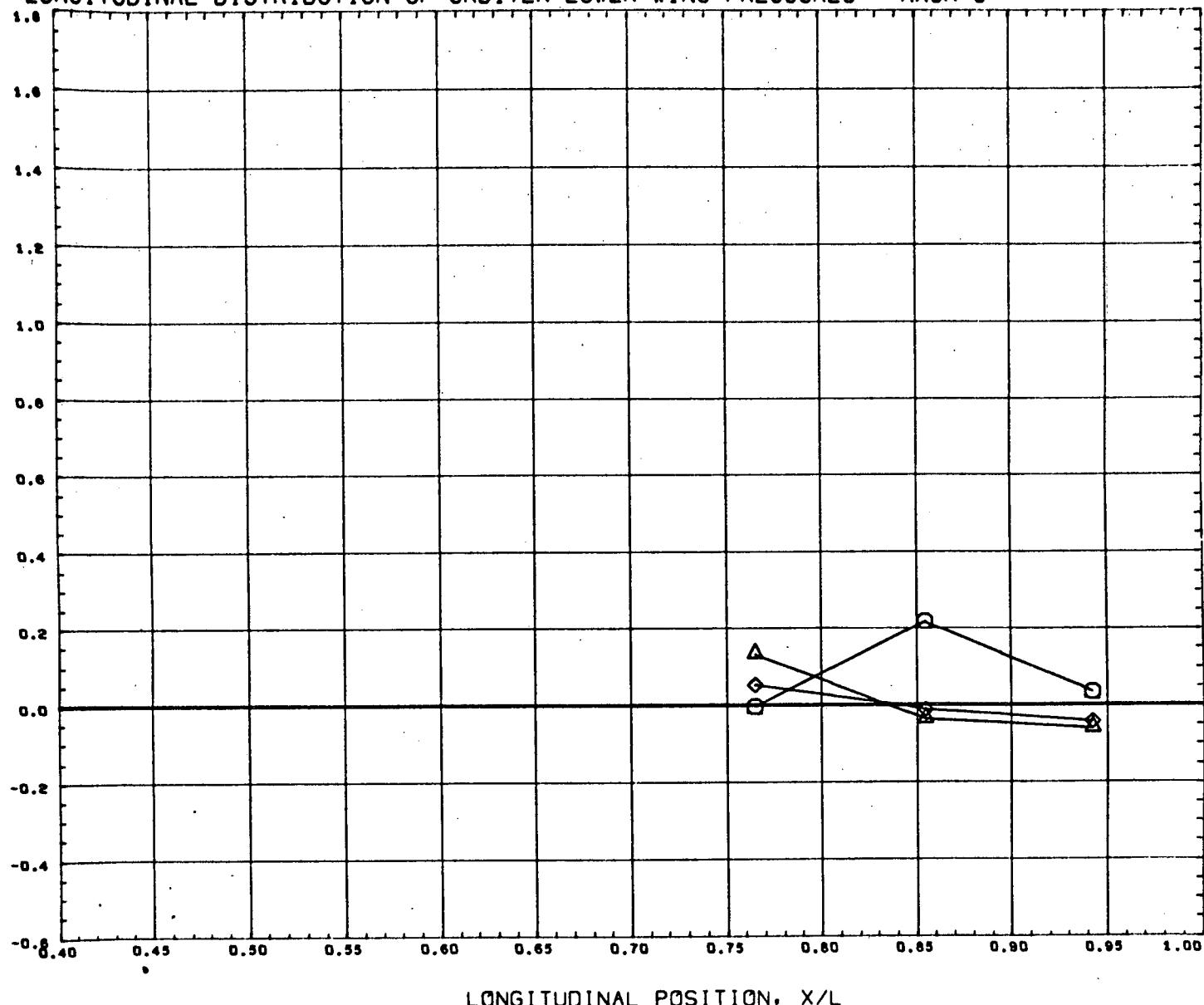
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8323•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

| | | | | |
|---|---|-------|-------|-------|
| ○ | - | 0.143 | 0.568 | 0.120 |
| △ | | 0.103 | | |
| ◊ | | 0.226 | | |

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|-------|--------------|
| ALPHAB | 0.019 | MACH 3.000 |
| ALPHAT | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

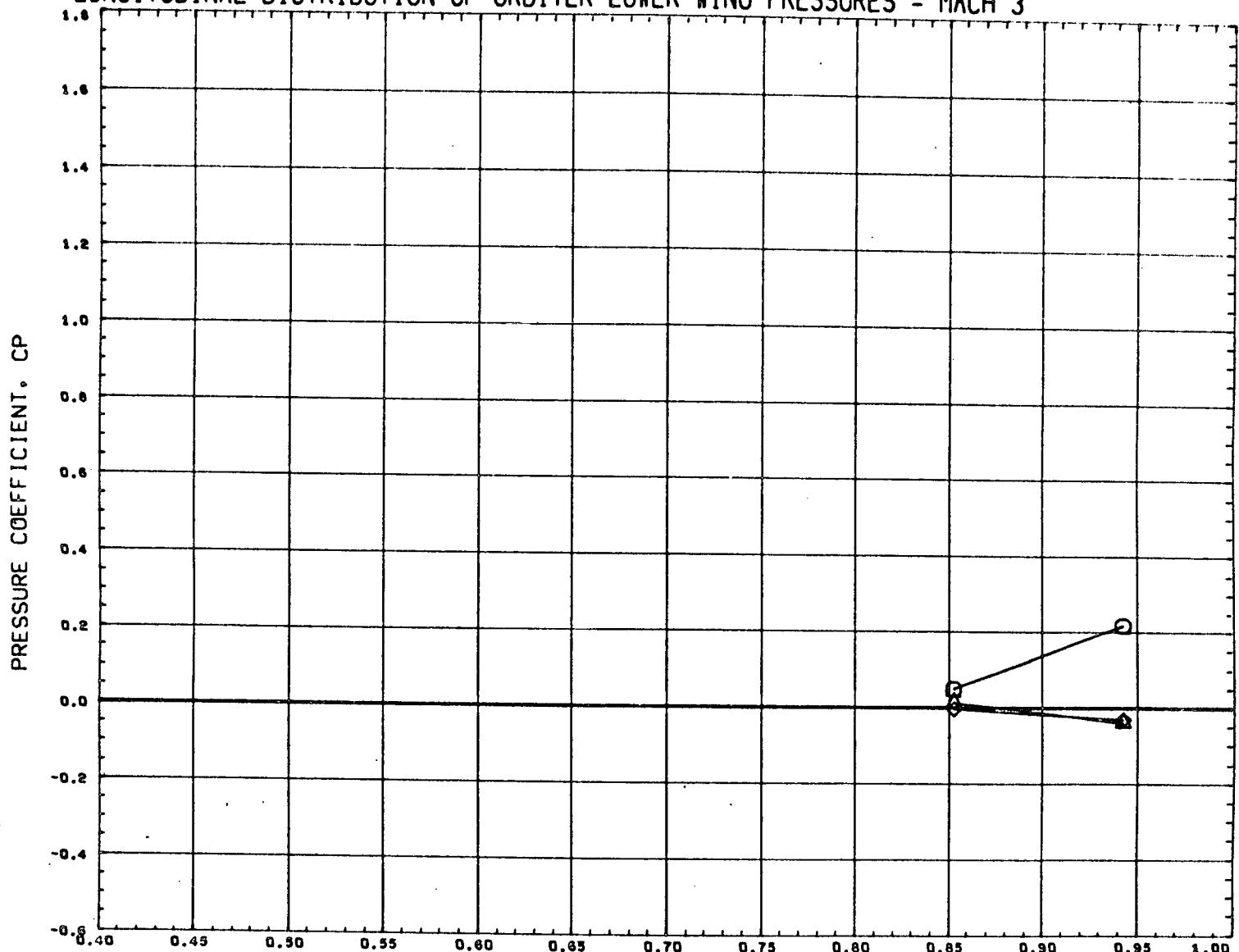
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8323•

PAGE 295

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 0.738 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

LONGITUDINAL POSITION. X/L

| PARAMETRIC VALUES | | |
|-------------------|-------|--------------|
| ALPHAB | 0.019 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

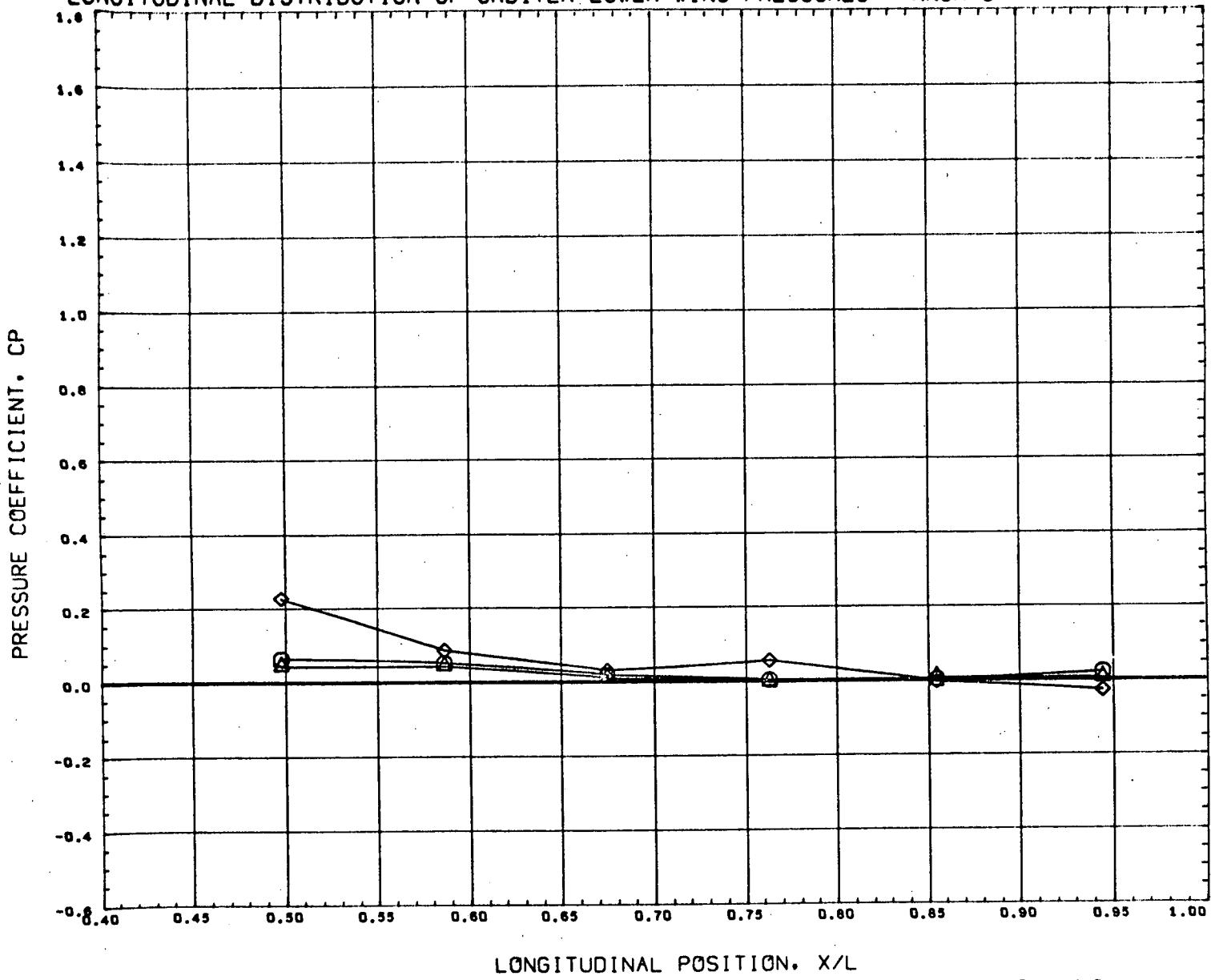
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8323•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 □ - 0.144 0.230 0.151
 △ - 0.104 0.227
 ◇ - 0.227

PARAMETRIC VALUES
 ALPHAB 0.019 MACH 3.000
 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

REFERENCE FILE

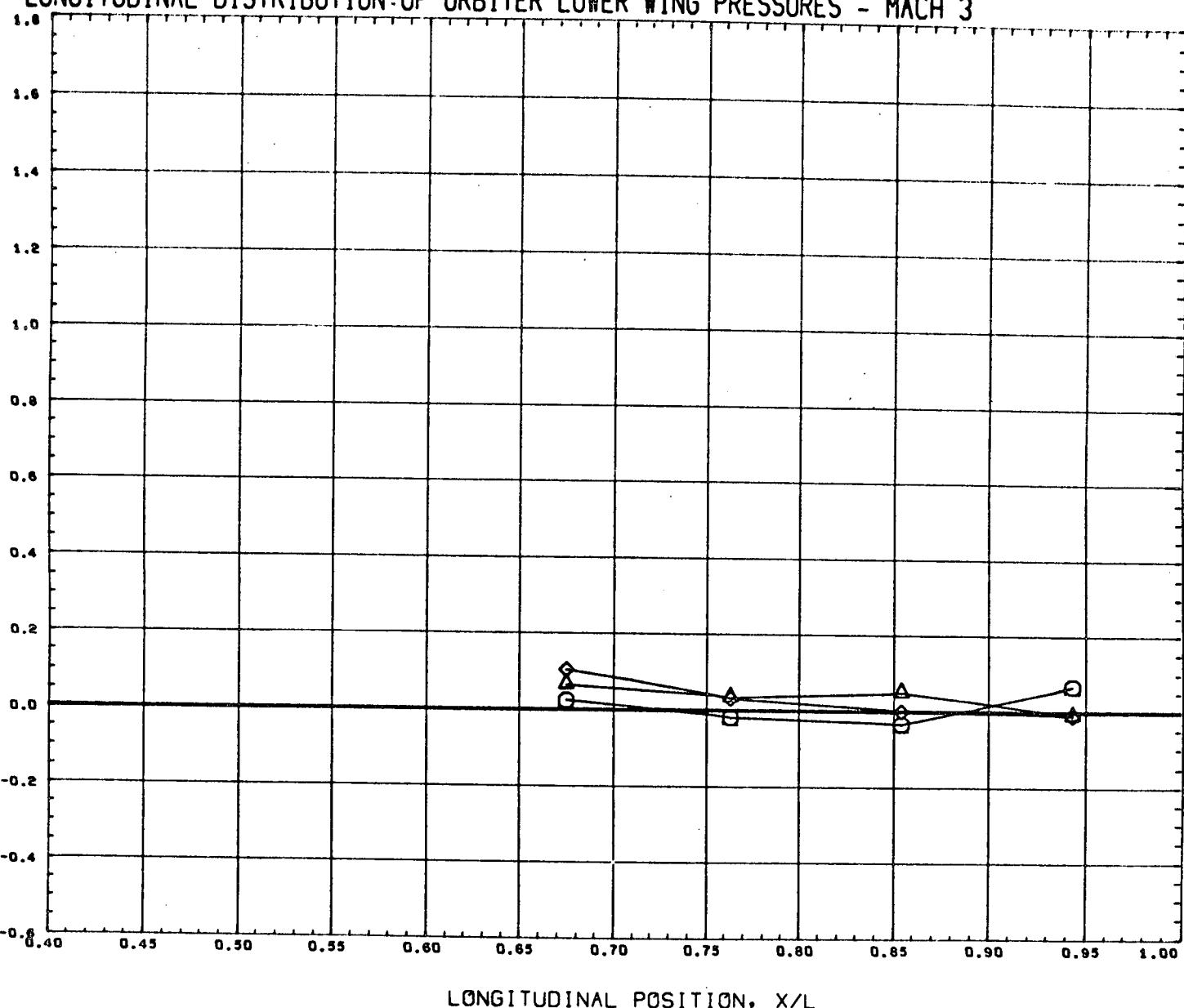
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8323•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

○ - 0.144 0.399 0.191

△ 0.104

◊ 0.227

PARAMETRIC VALUES

| | | | |
|--------|-------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

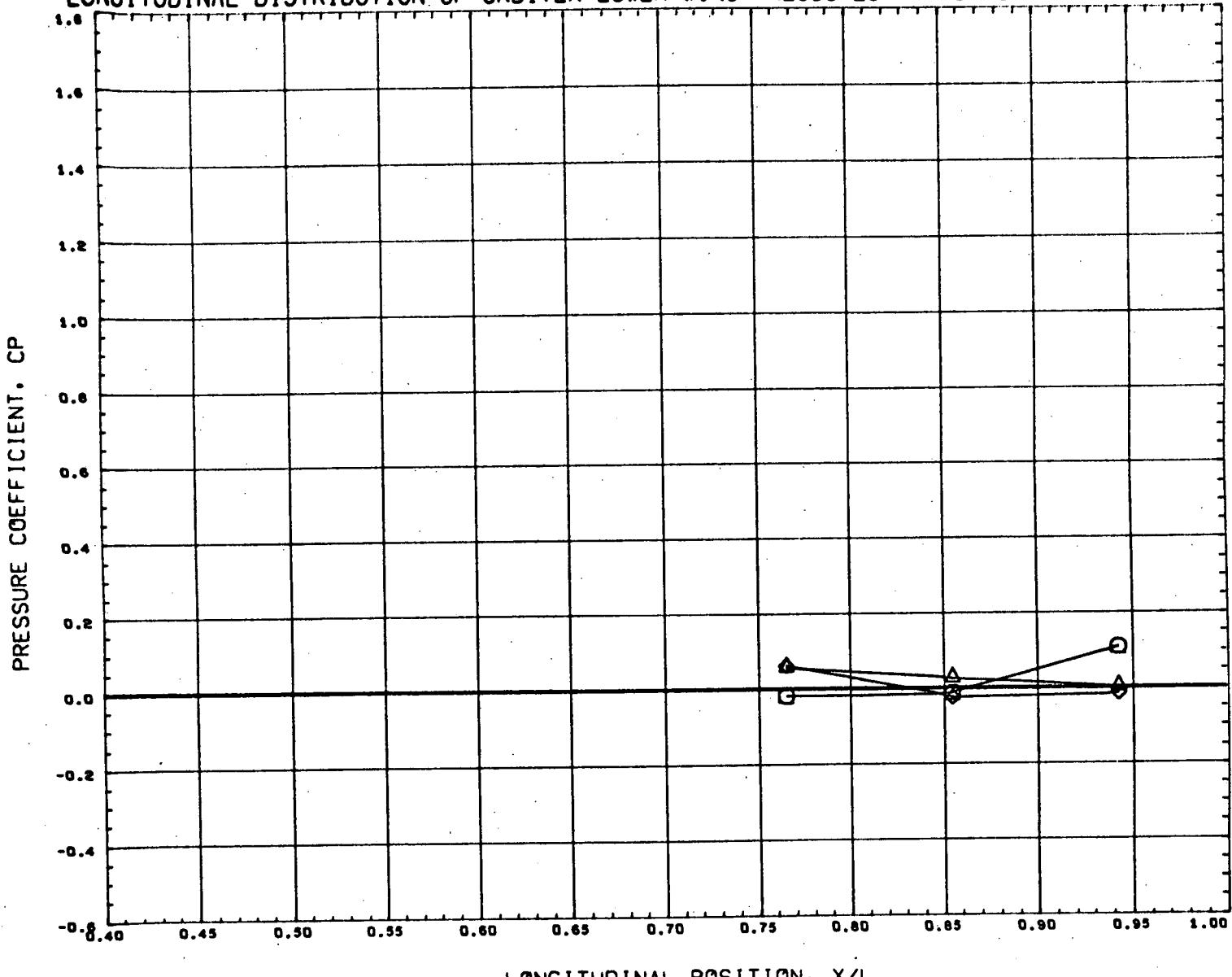
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8323•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



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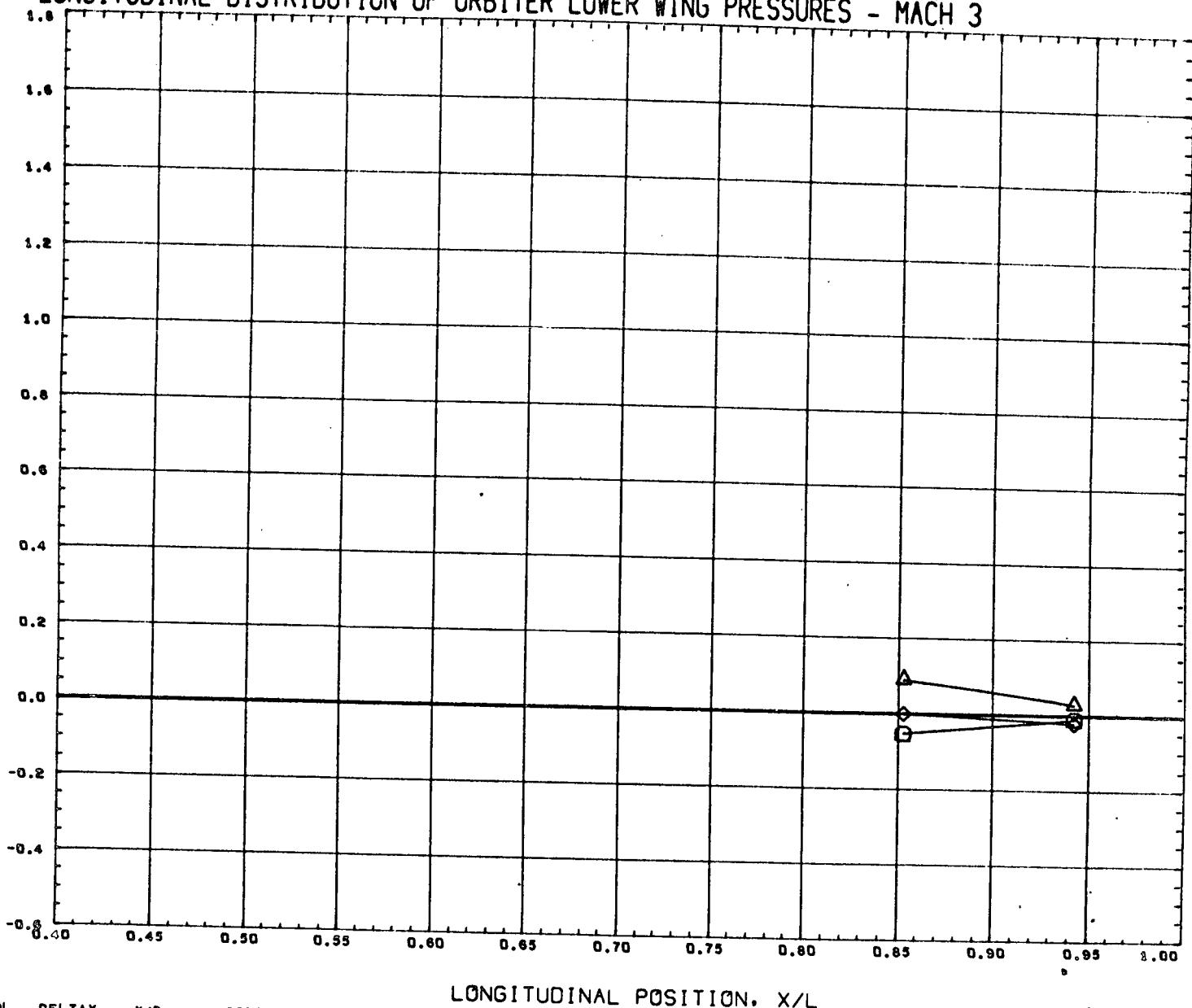
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8323•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | -0.144 | 0.738 | 0.151 |
| △ | 0.104 | | |
| ◊ | 0.227 | | |

LONGITUDINAL POSITION. X/L

| PARAMETRIC VALUES | | |
|-------------------|-------|--------------|
| ALPHAB | 0.019 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

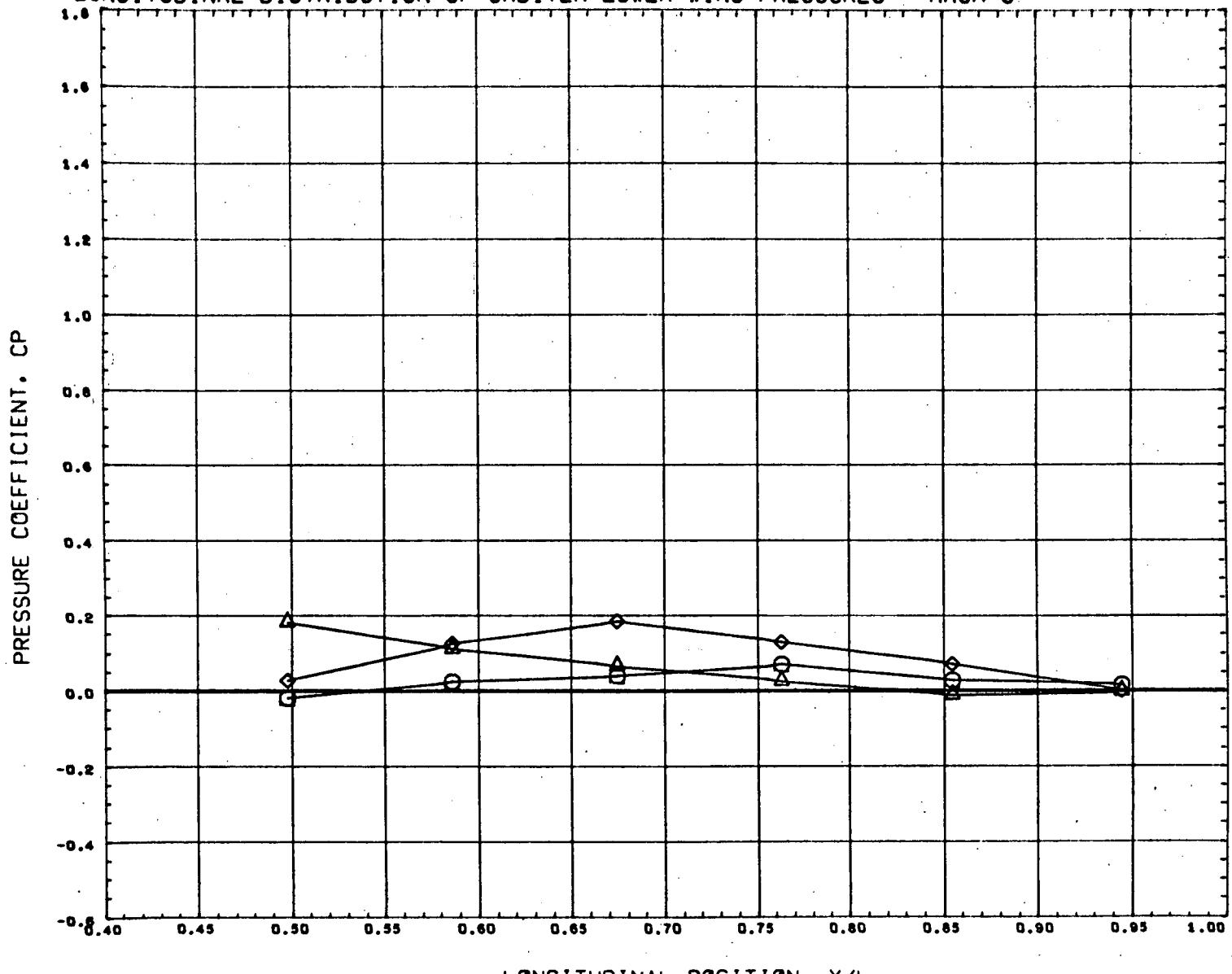
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8323•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 □ - 0.143 0.230 0.226
 ◇ 0.103 0.227

PARAMETRIC VALUES
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 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

REFERENCE FILE

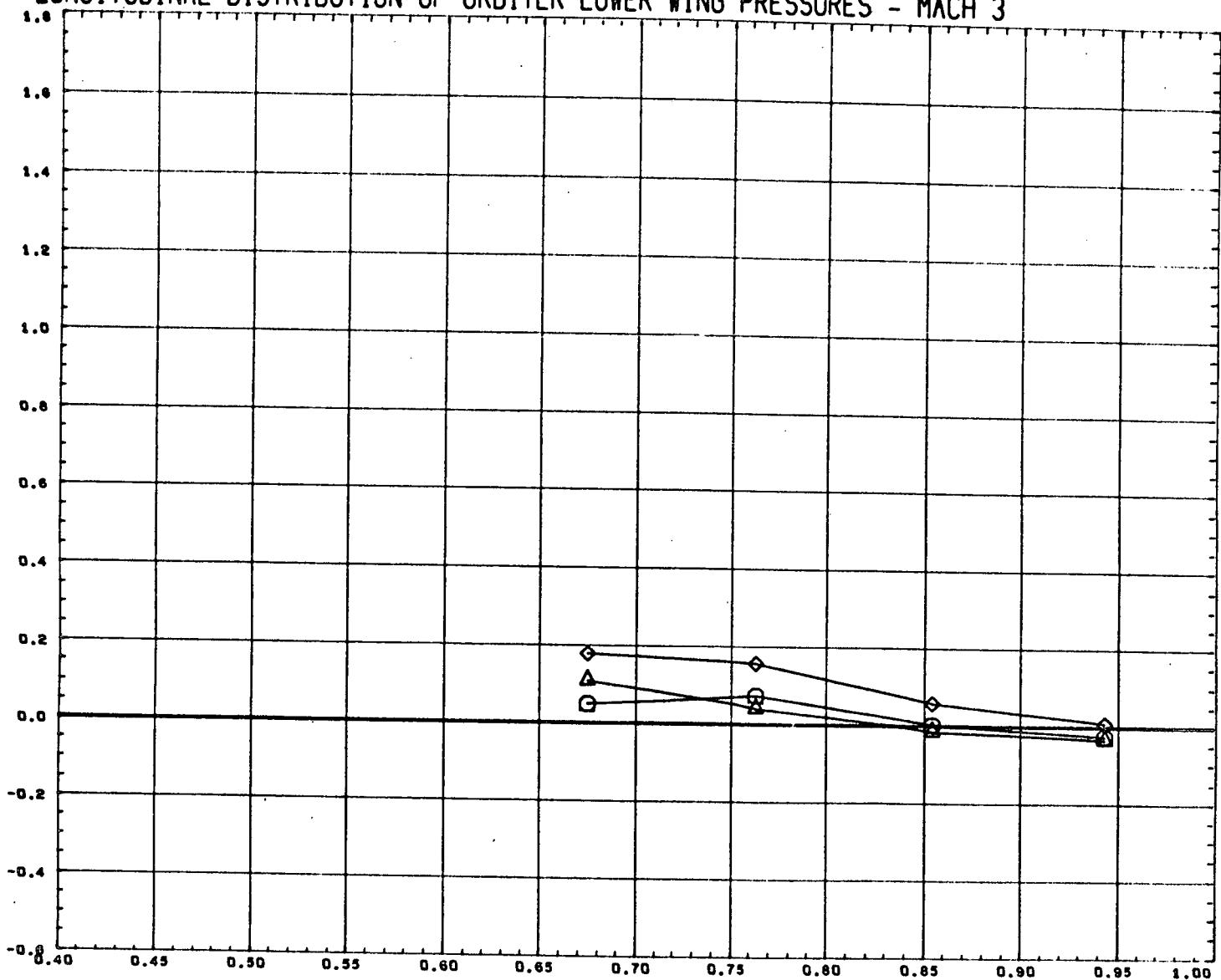
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8323•

PAGE 301

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|------------|--------|-------|--------|
| Δ | -0.143 | 0.399 | 0.228 |
| \square | 0.103 | | |
| \diamond | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------------|
| ALPHAB | 0.019 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

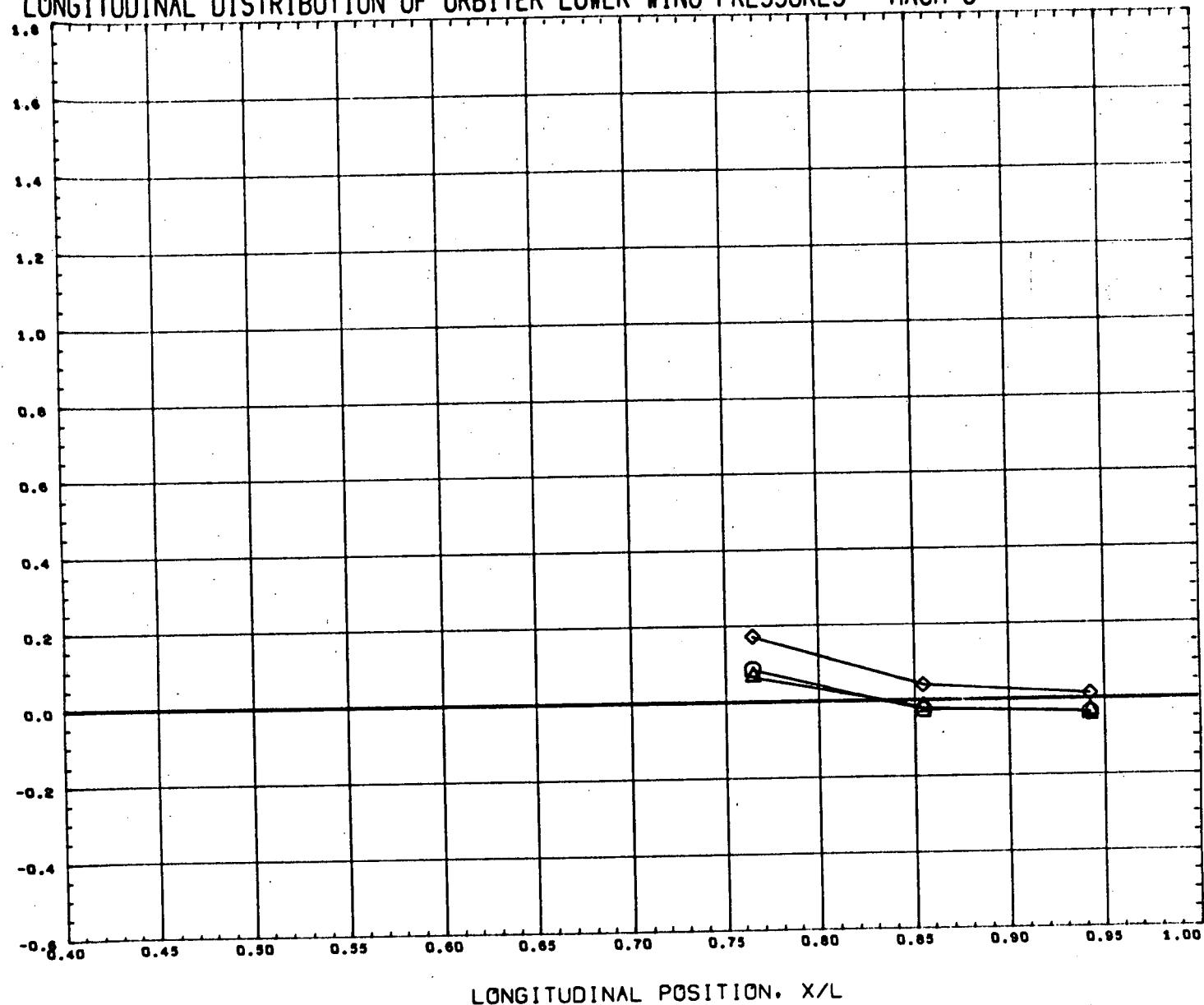
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8323•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
 □ - 0.143 0.568 0.228
 △ - 0.103 0.568 0.228
 ◇ - 0.227 0.568 0.228

PARAMETRIC VALUES
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 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

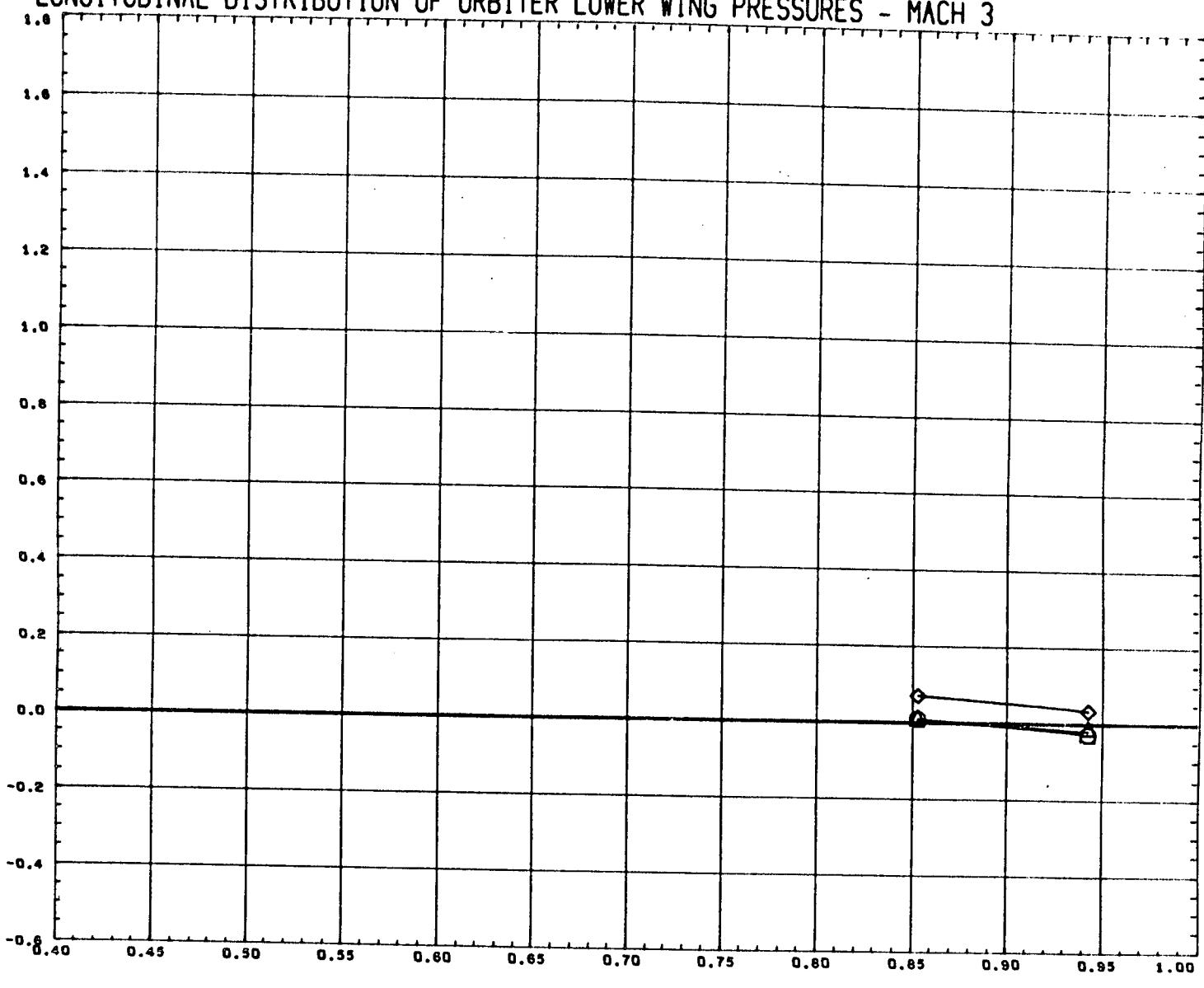
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 AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8323•

PAGE 303

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|------------|---------|-------|---------|
| \circ | - 0.143 | 0.736 | 0.228 |
| Δ | 0.103 | | |
| \diamond | 0.227 | | |

| PARAMETRIC VALUES | | | |
|-------------------|-------|--------|-------|
| ALPHAB | 0.019 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

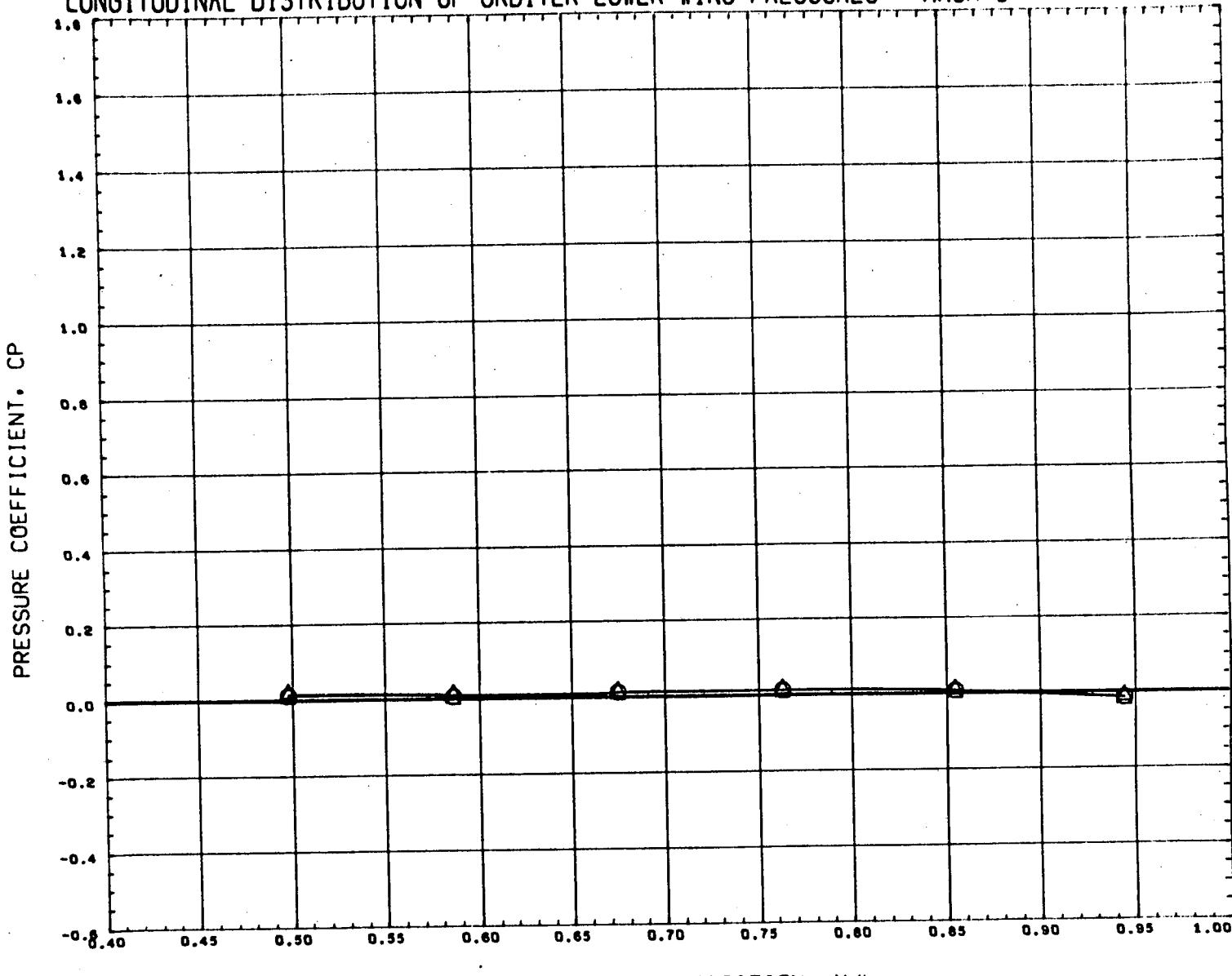
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8323•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

○ - 0.391 0.230 0.908

△ - 0.514

PARAMETRIC VALUES

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|-------|
| ALPHAI | 0.019 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

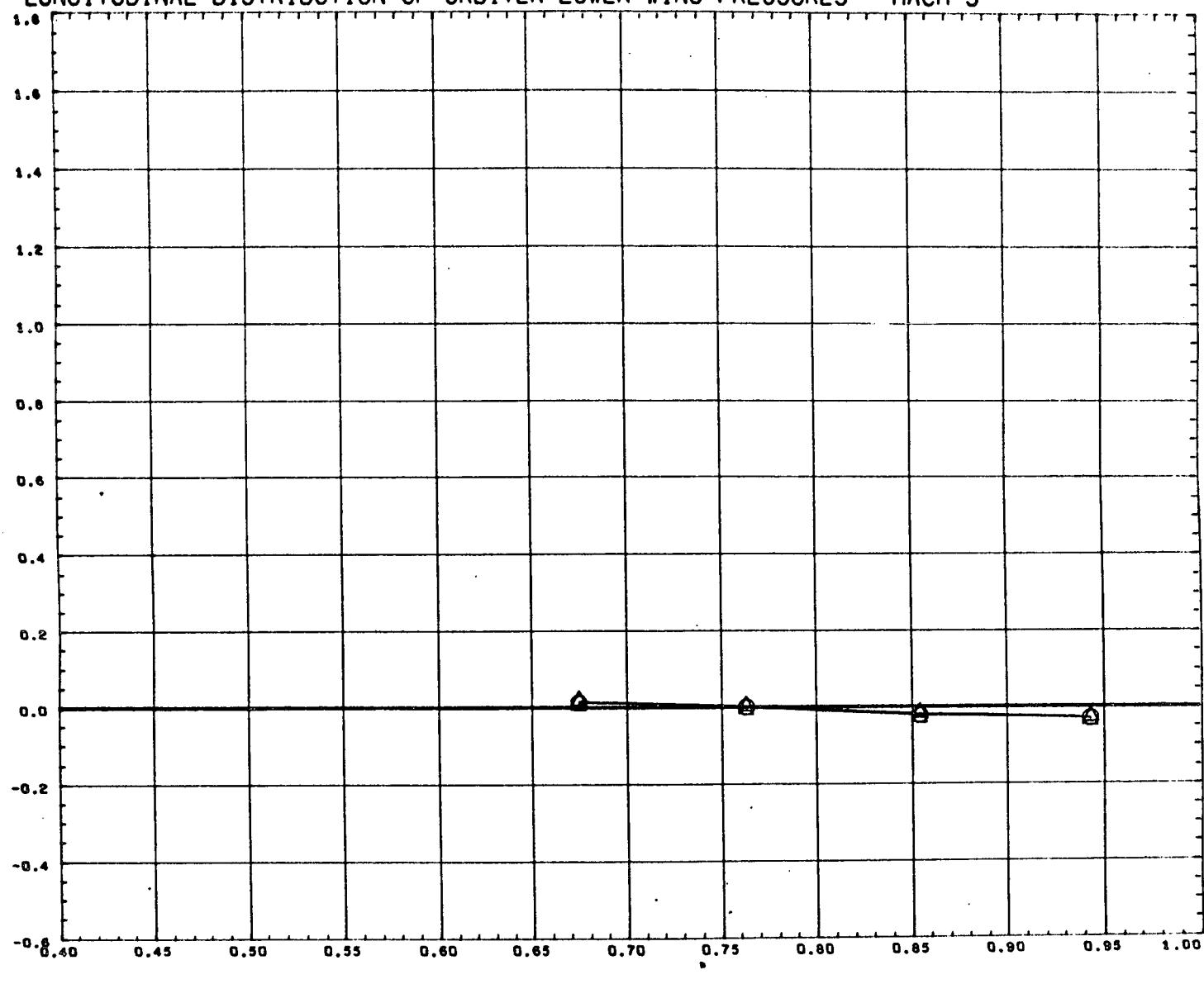
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8323•

PAGE 305

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|-------------|---------|-------|--------|
| \square | - 0.391 | 0.399 | 0.908 |
| \triangle | | 0.514 | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------------|
| ALPHAB | 0.019 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

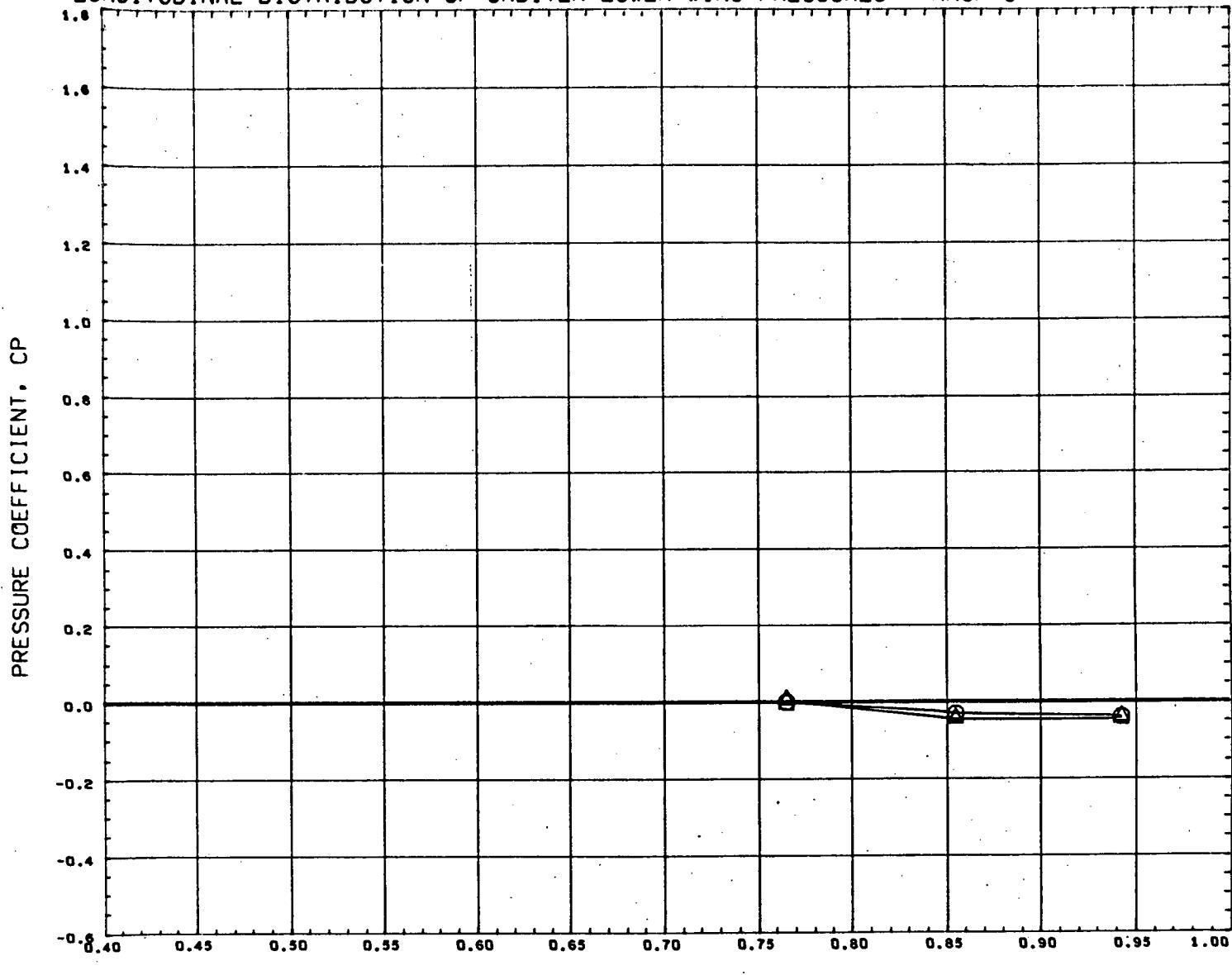
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8323•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



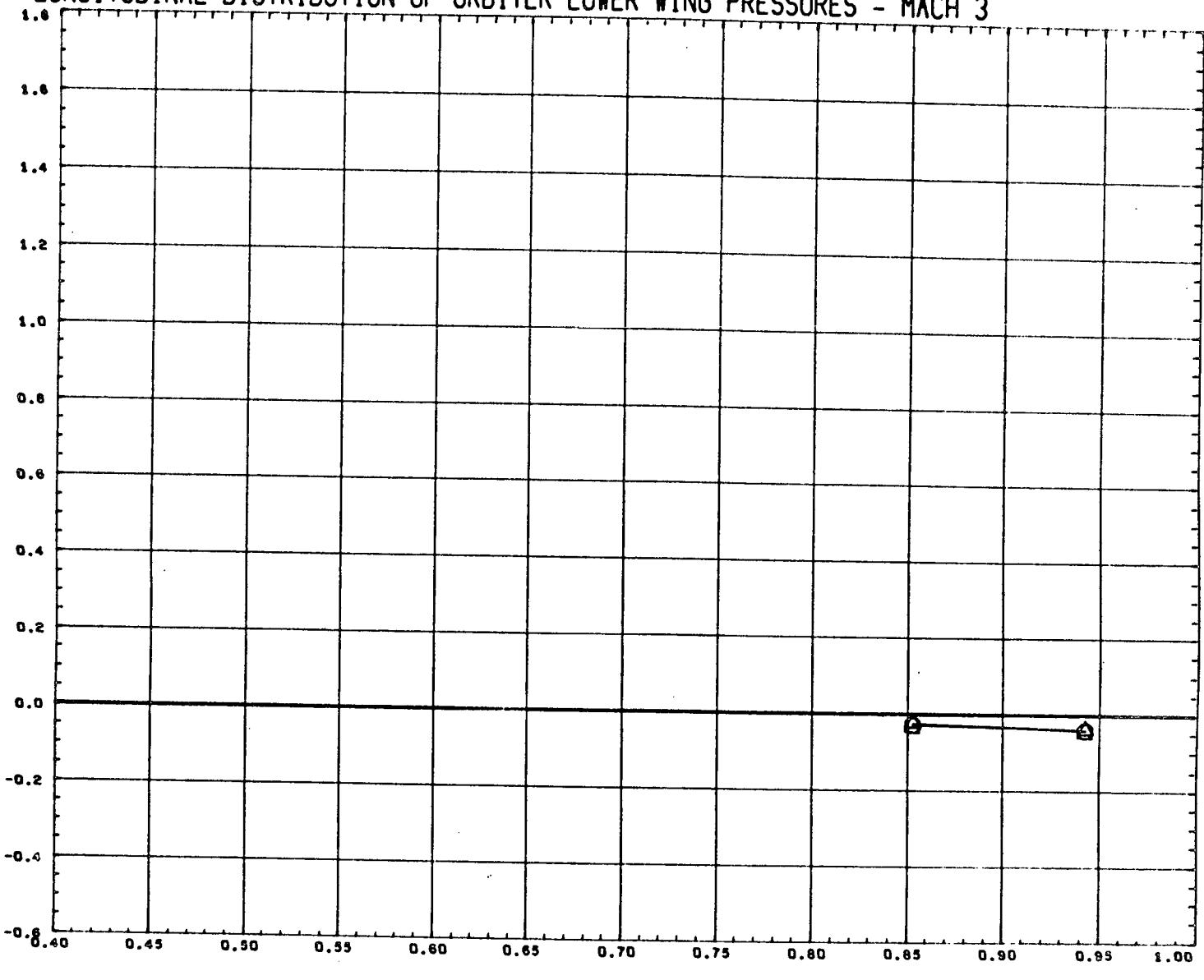
REFERENCE FILE
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8323•

PAGE 307

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
 □ - 0.391 0.738 0.908
 △ 0.514

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|-------|-----------------|
| ALPHAB | 0.019 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

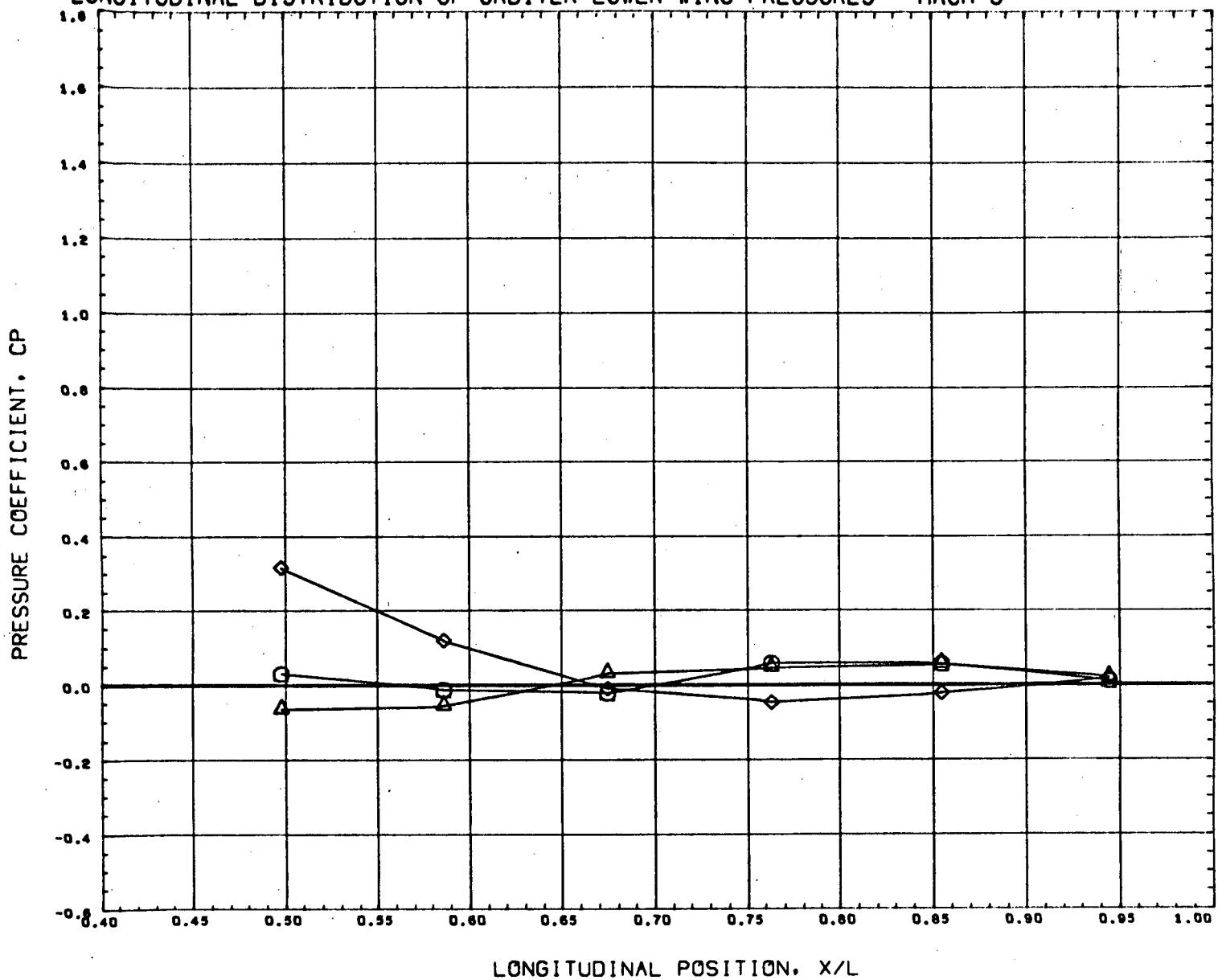
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8323•

PAGE 308

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



| SYMBOL | DELTA X | Y/B | DELTA Z |
|------------|---------|-------|---------|
| Δ | -0.143 | 0.250 | 0.120 |
| \square | 0.103 | | |
| \diamond | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|-------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

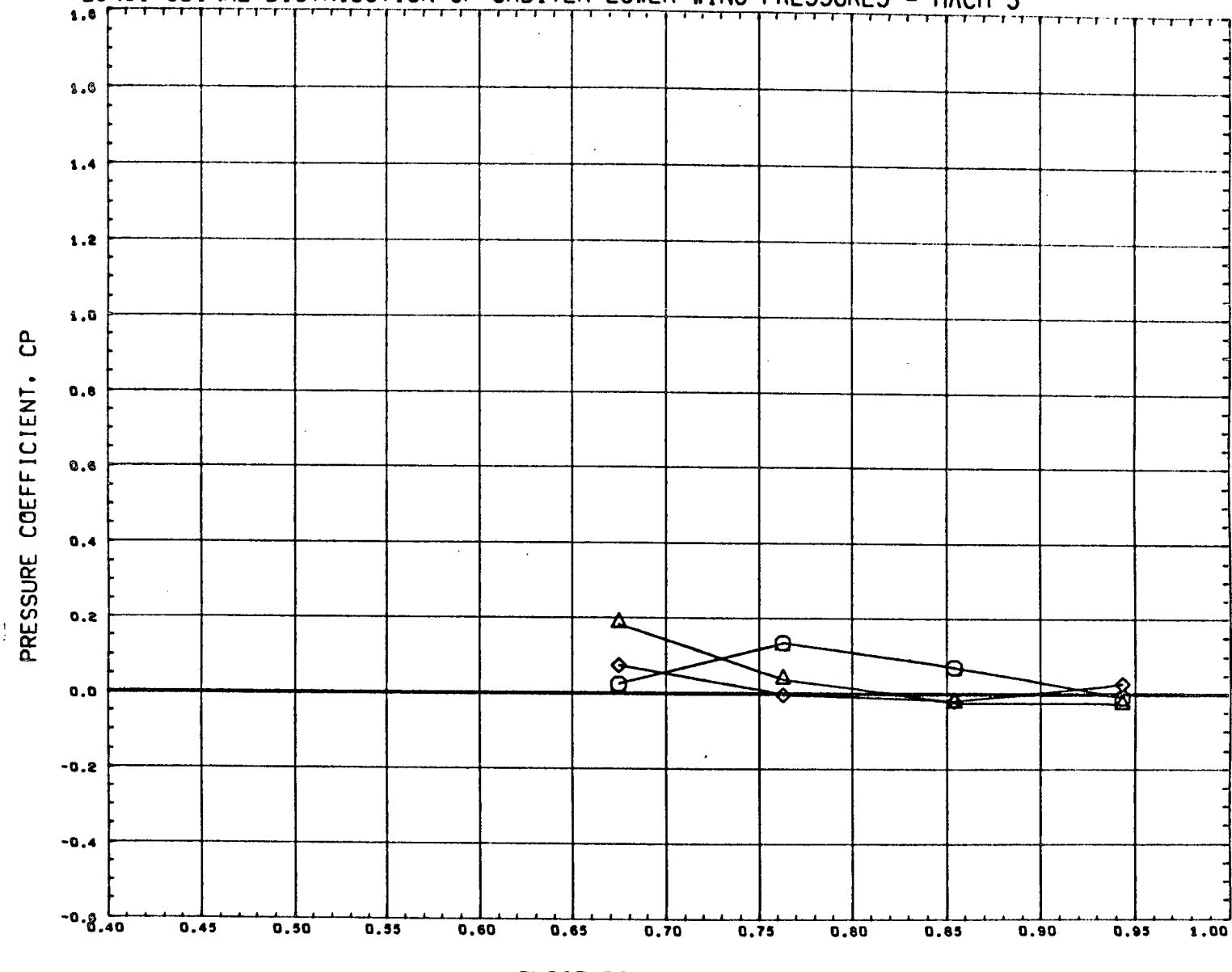
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8324•

PAGE 309

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 □ - 0.143 0.399 0.120
 ○ 0.103
 ◇ 0.226

PARAMETRIC VALUES
 ALPHAB 5.020 MACH 3.000
 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

REFERENCE FILE

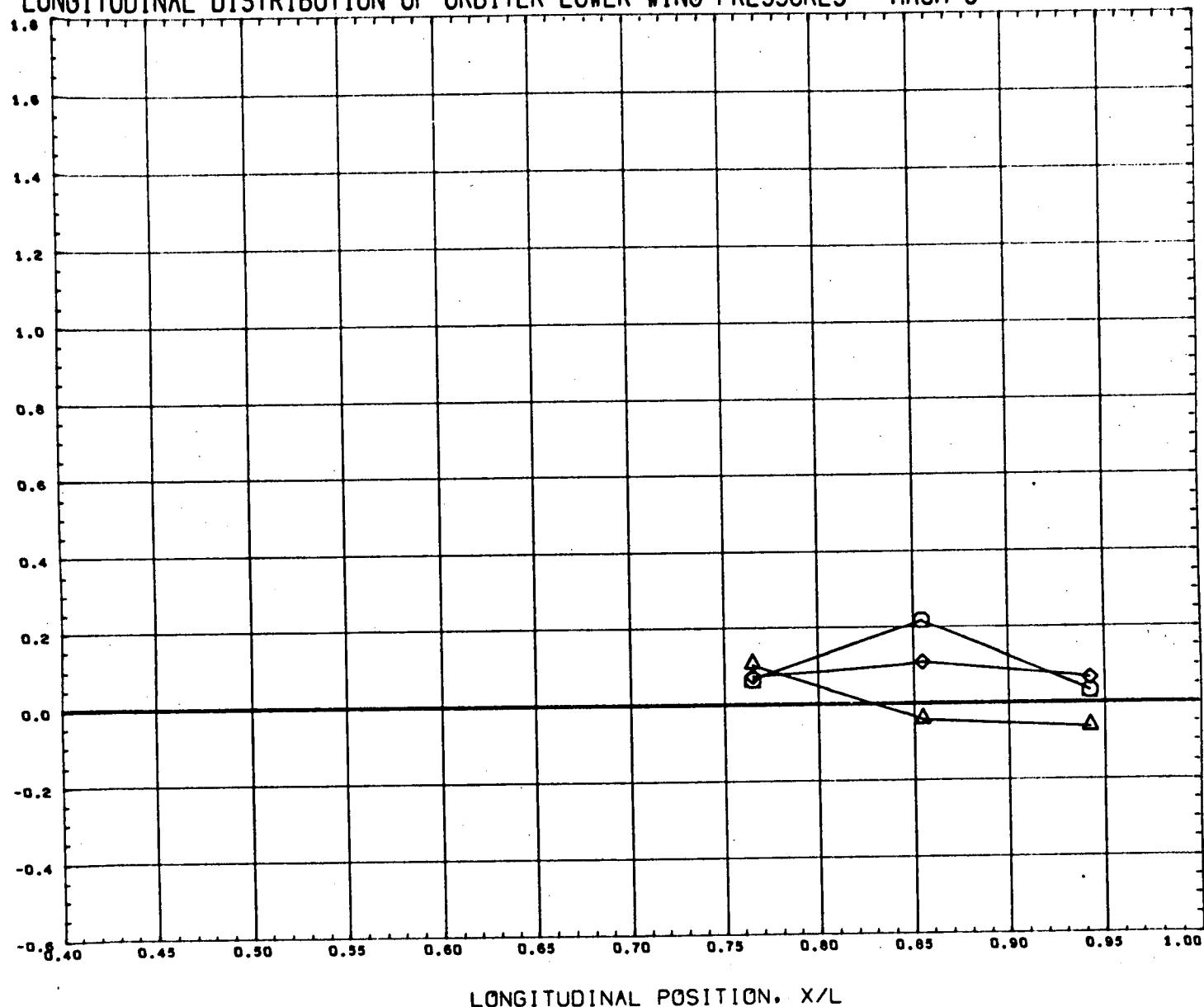
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8324•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX Y/B DELTAZ

\circ - 0.143 0.568 0.120

\triangle 0.103 0.568 0.120

\diamond 0.226 0.568 0.120

PARAMETRIC VALUES

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|-------|
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

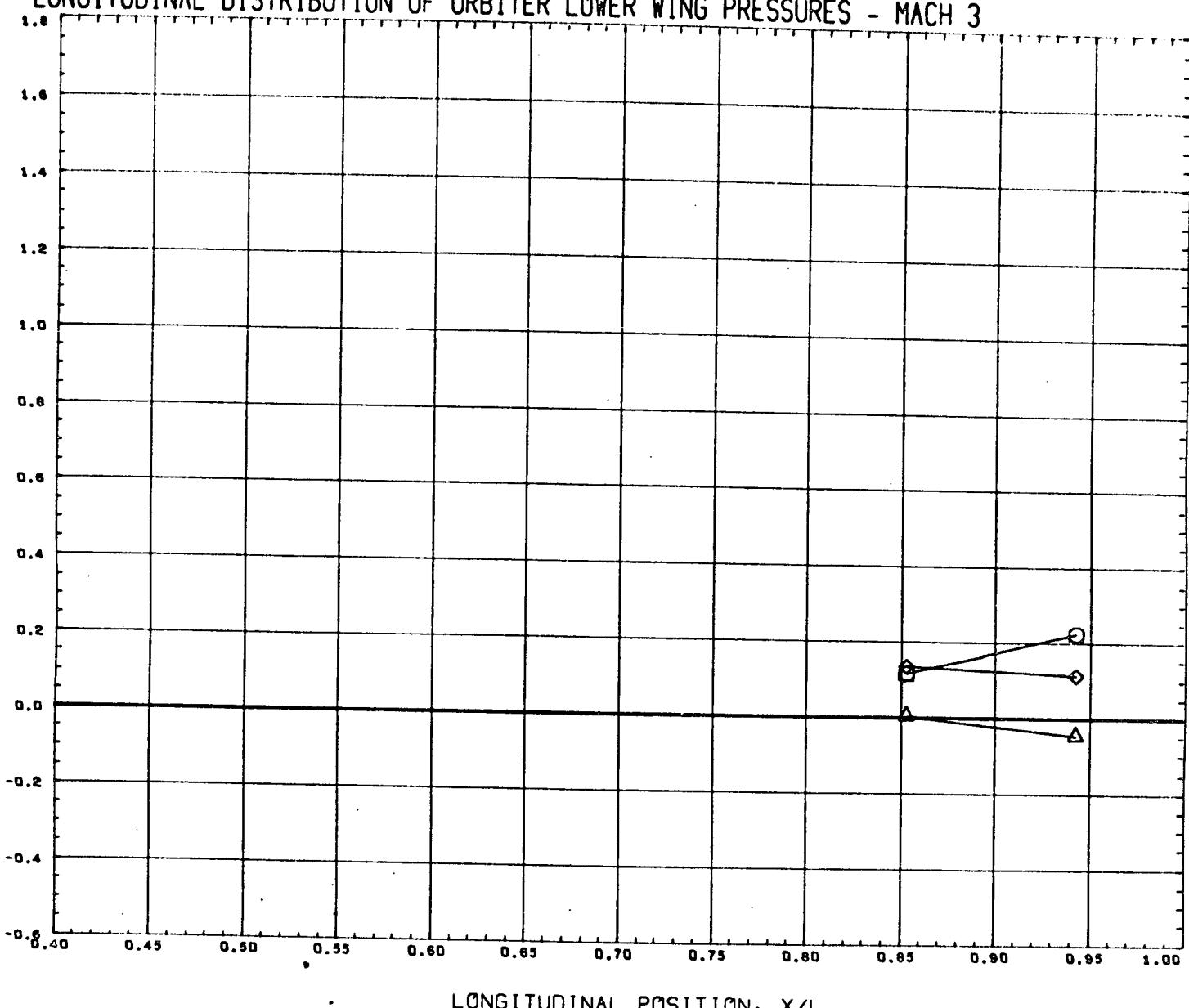
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8324•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.143 | 0.738 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------|
| ALPHAB | 5.020 | MACH |
| ALPHAI | 0.000 | ORBPOW |
| BSTPOW | 0.000 | |

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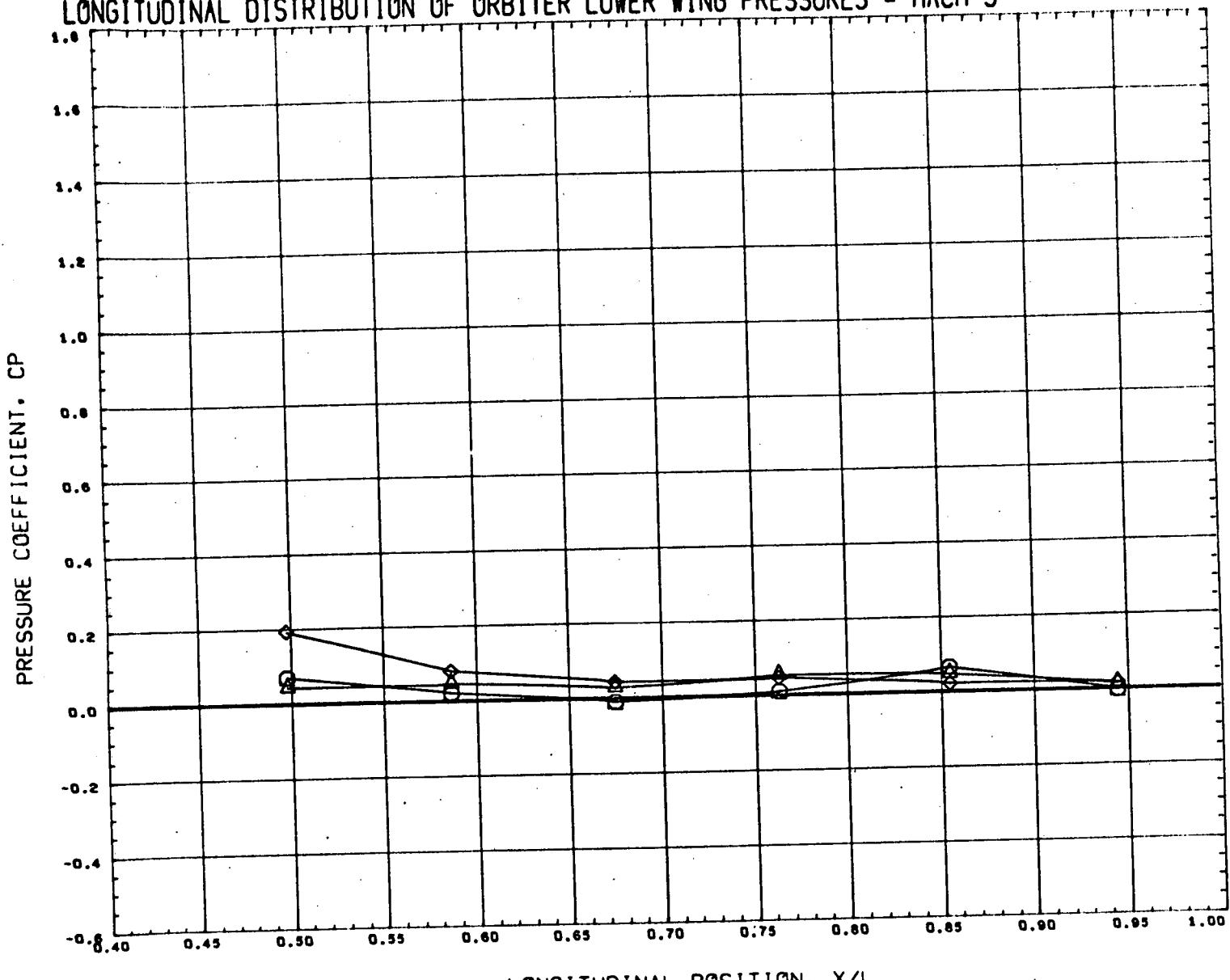
AEDC VA1163 MDAC ORBITER (LOWER WING)

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2/8

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 □ 0.143 0.230 0.151
 △ 0.103 0.227
 ◇ 0.000

PARAMETRIC VALUES
 ALPHAB 5.020 MACH 3.000
 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

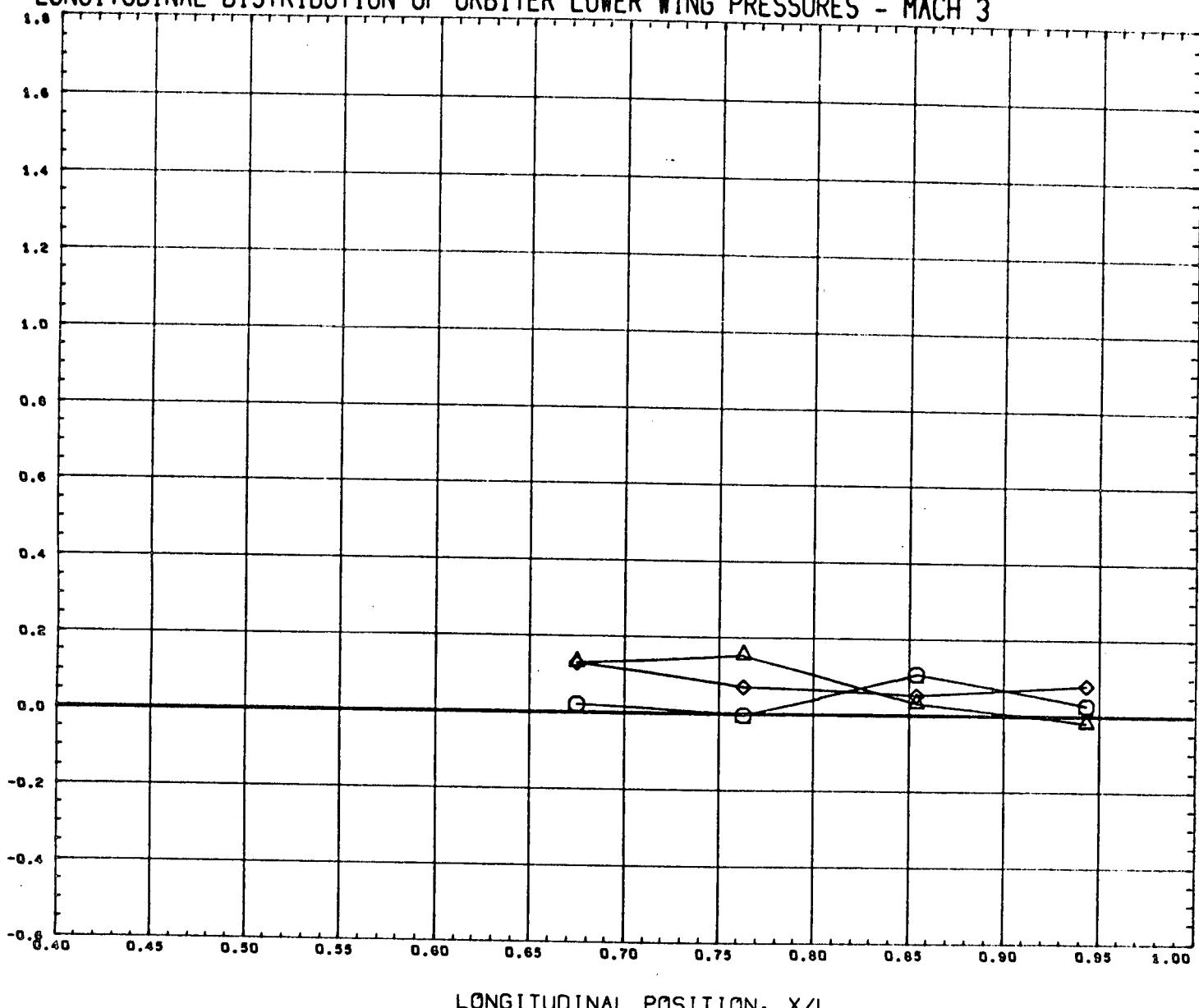
REFERENCE FILE
 AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8324•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
 ○ - 0.143 0.399 0.151
 △ 0.103
 ◇ 0.227

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | | |
|-------------------|-------|--------|-------|
| ALPHAB | 5.020 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

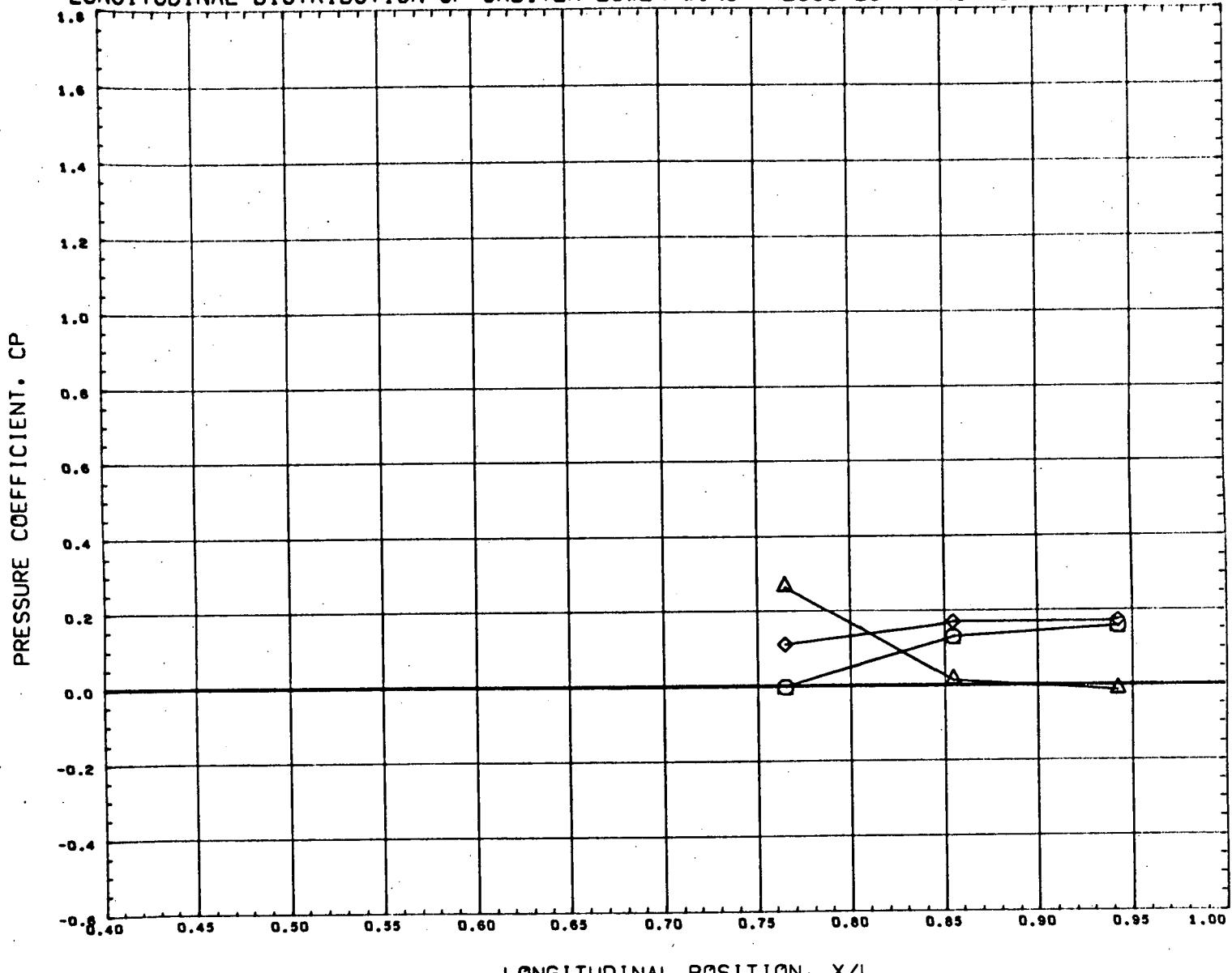
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8324•

PAGE 314

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O - 0.143 0.568 0.151
 △ 0.103 0.103 0.227

PARAMETRIC VALUES
 ALPHAB 5.020 MACH 3.000
 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

REFERENCE FILE

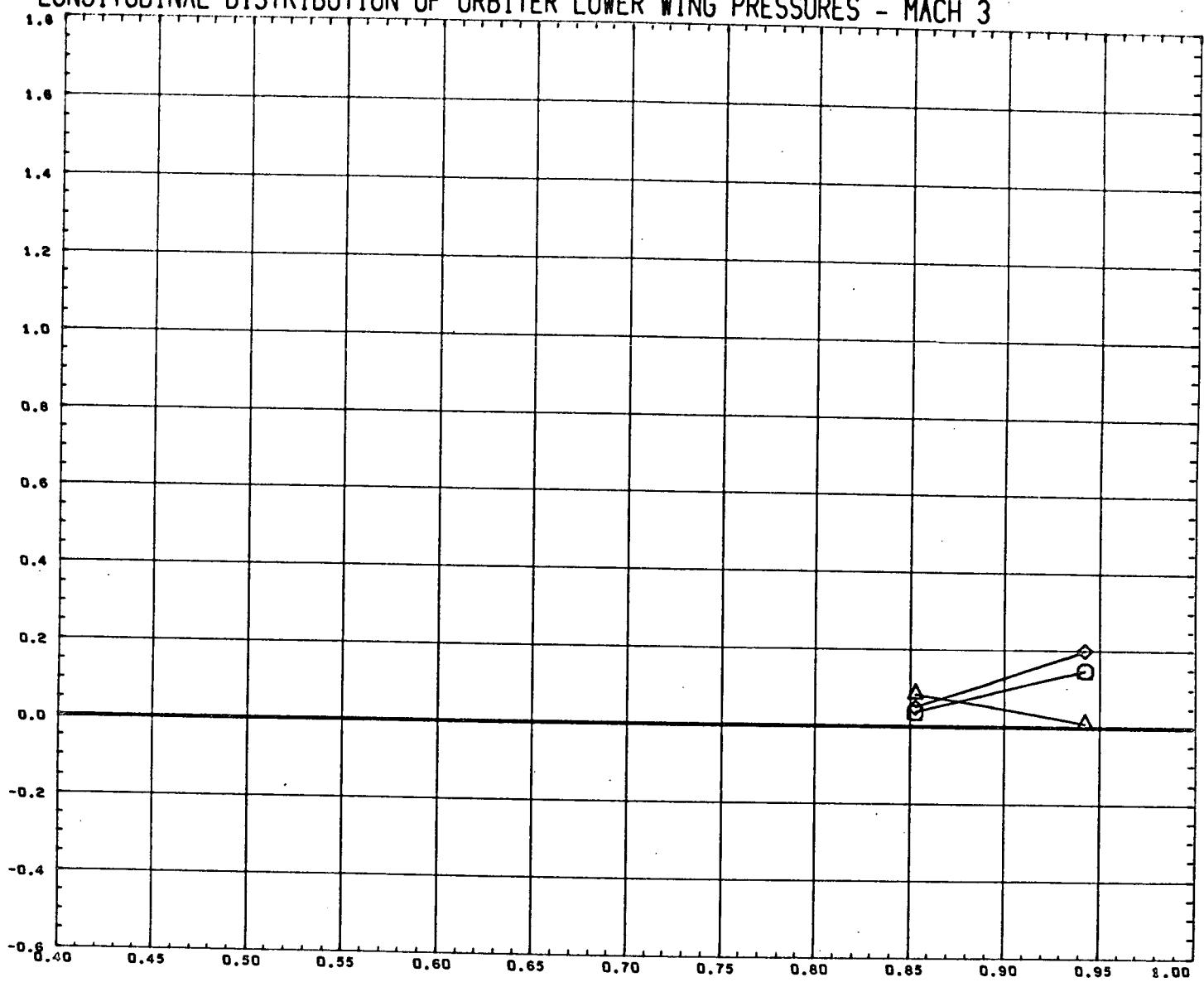
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8324•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/E | DELTA Z |
|--------|---------|-------|---------|
| - | 0.143 | 0.738 | 0.151 |
| ◊ | 0.103 | 0.227 | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------------|
| ALPHAB | 5.020 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

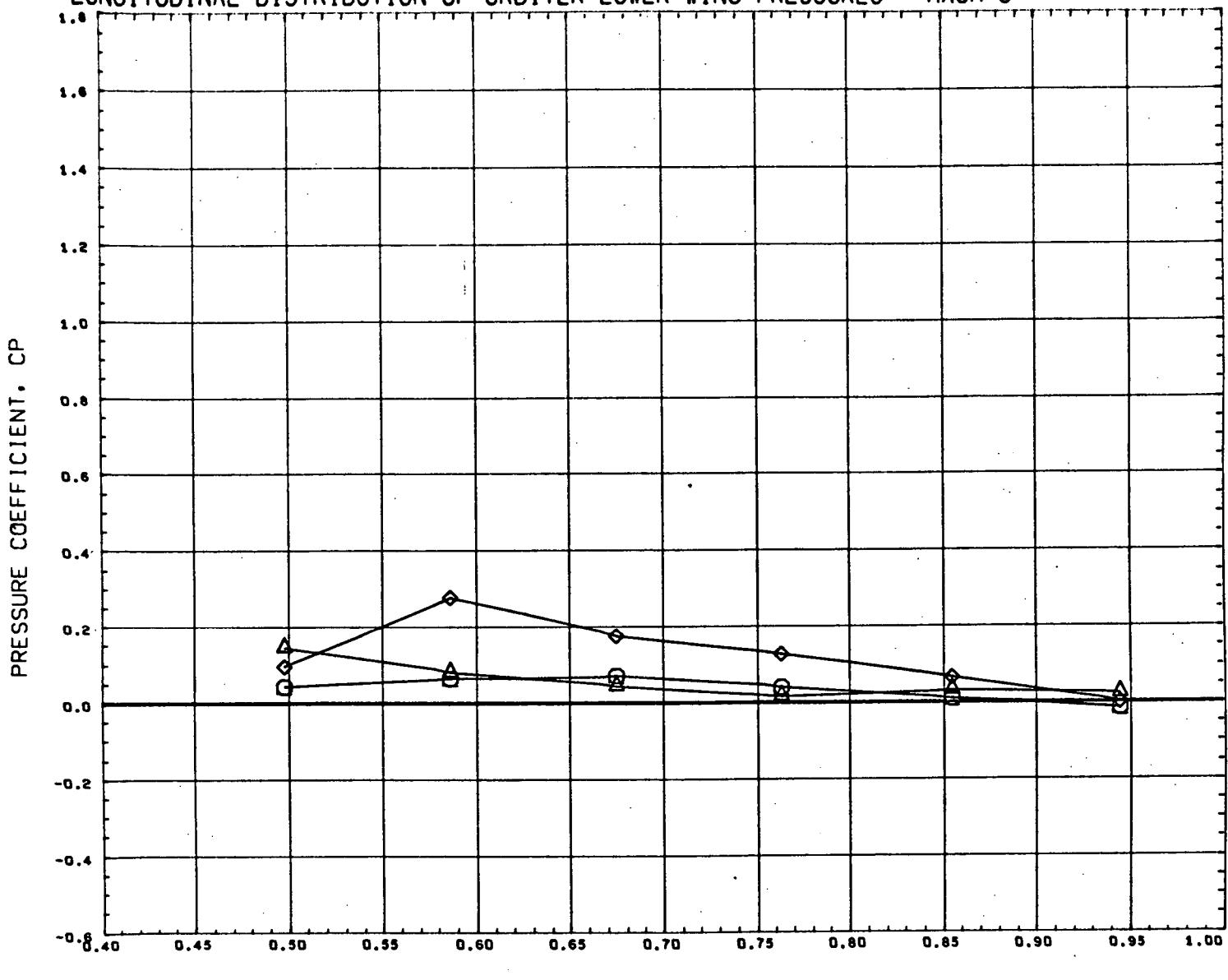
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AEDC VAI163 MDAC ORBITER (LOWER WING)

•HT8324•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 0.230 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.228 | | |

PARAMETRIC VALUES

| | | | |
|--------|-------|--------|-------|
| ALPHAB | 5.020 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

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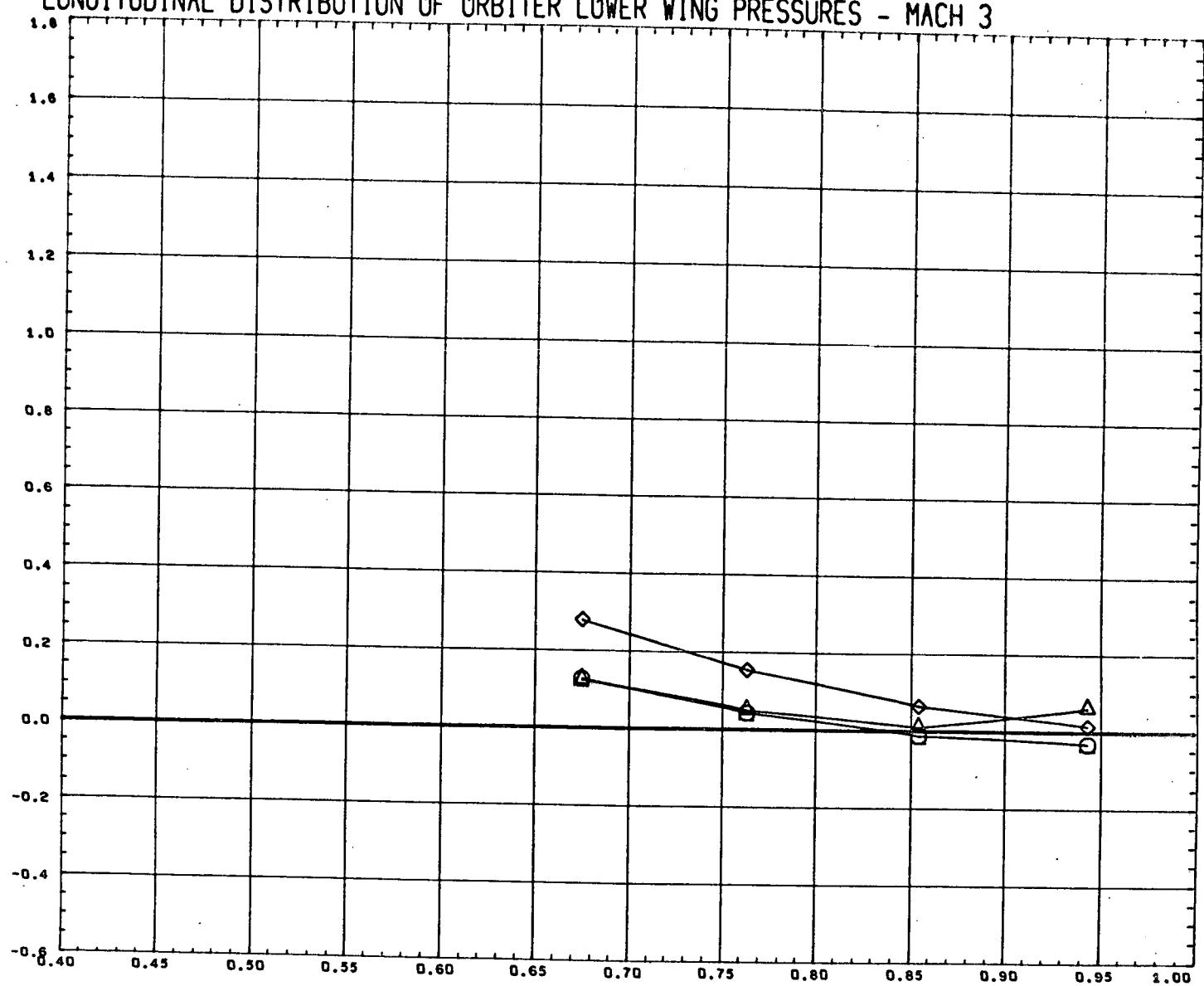
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8324•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 0.399 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------|
| ALPHAB | 5.020 | MACH |
| ALPHAI | 0.000 | ORBPOW |
| BSTPOW | 0.000 | |

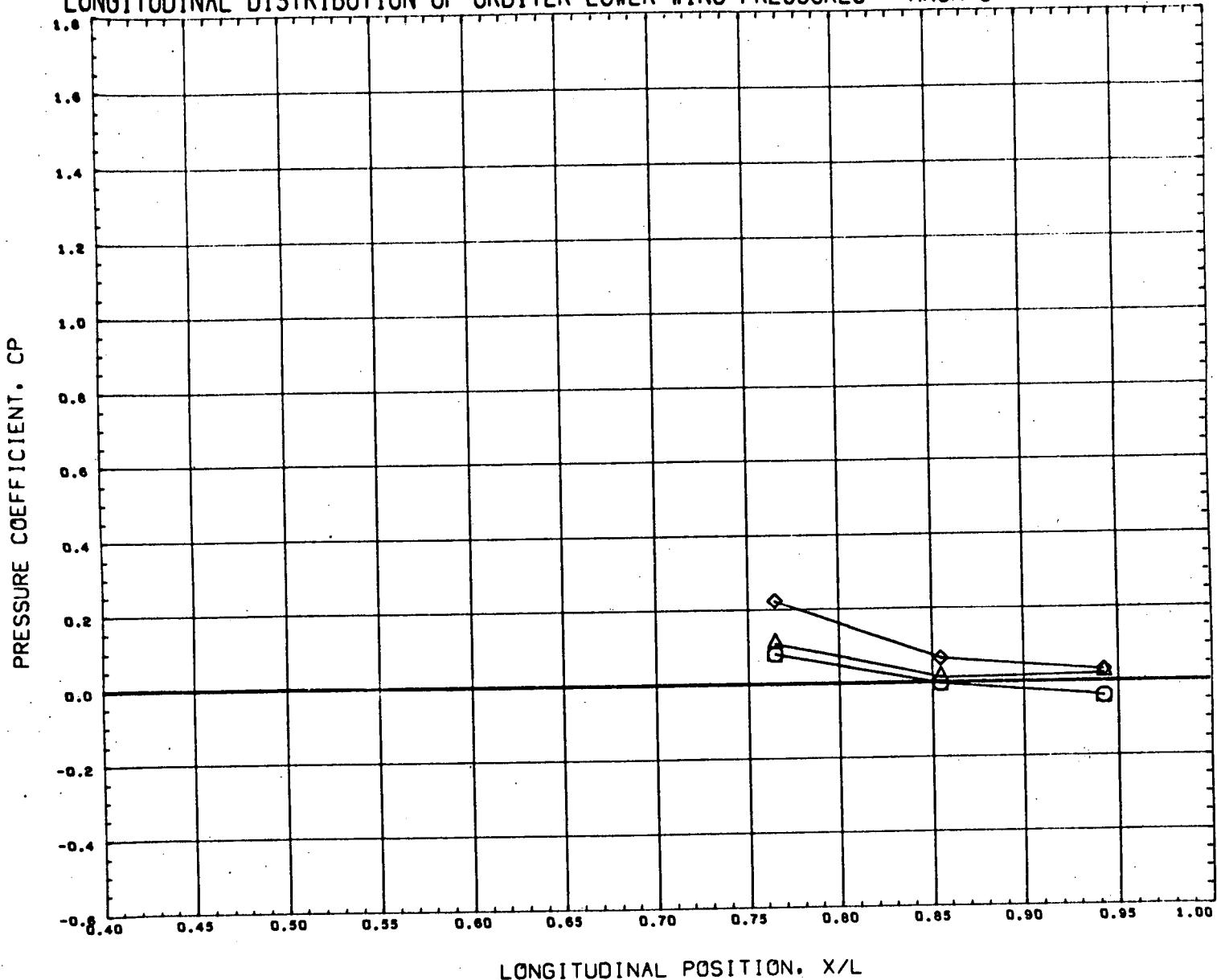
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8324•

PAGE 318

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



| PARAMETRIC VALUES | | | |
|-------------------|-------|--------|-------|
| ALPHAB | 5.020 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

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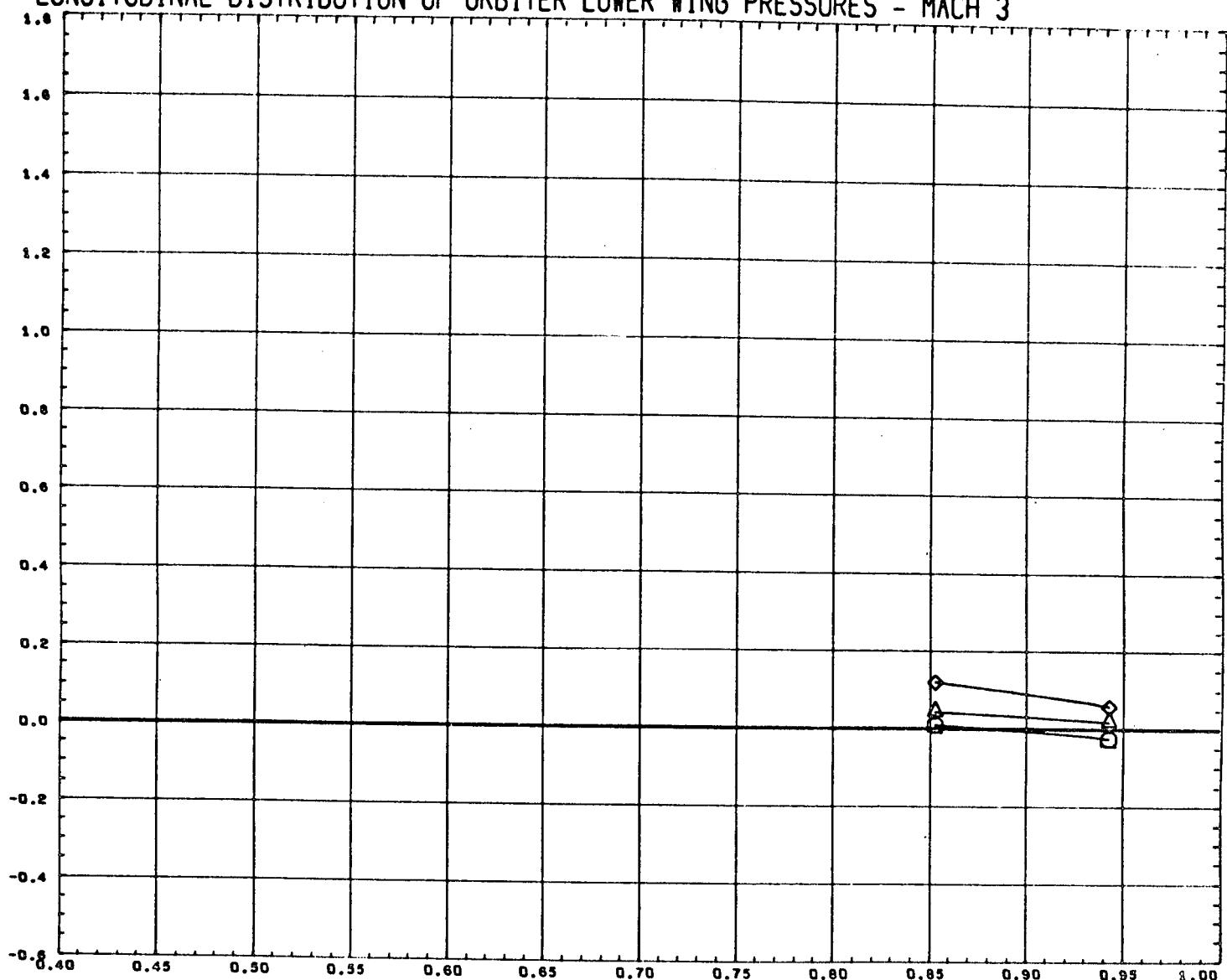
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8324•

PAGE 319

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 0.738 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.228 | | |

| PARAMETRIC VALUES | | | |
|-------------------|-------|--------|-------|
| ALPHAB | 5.020 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

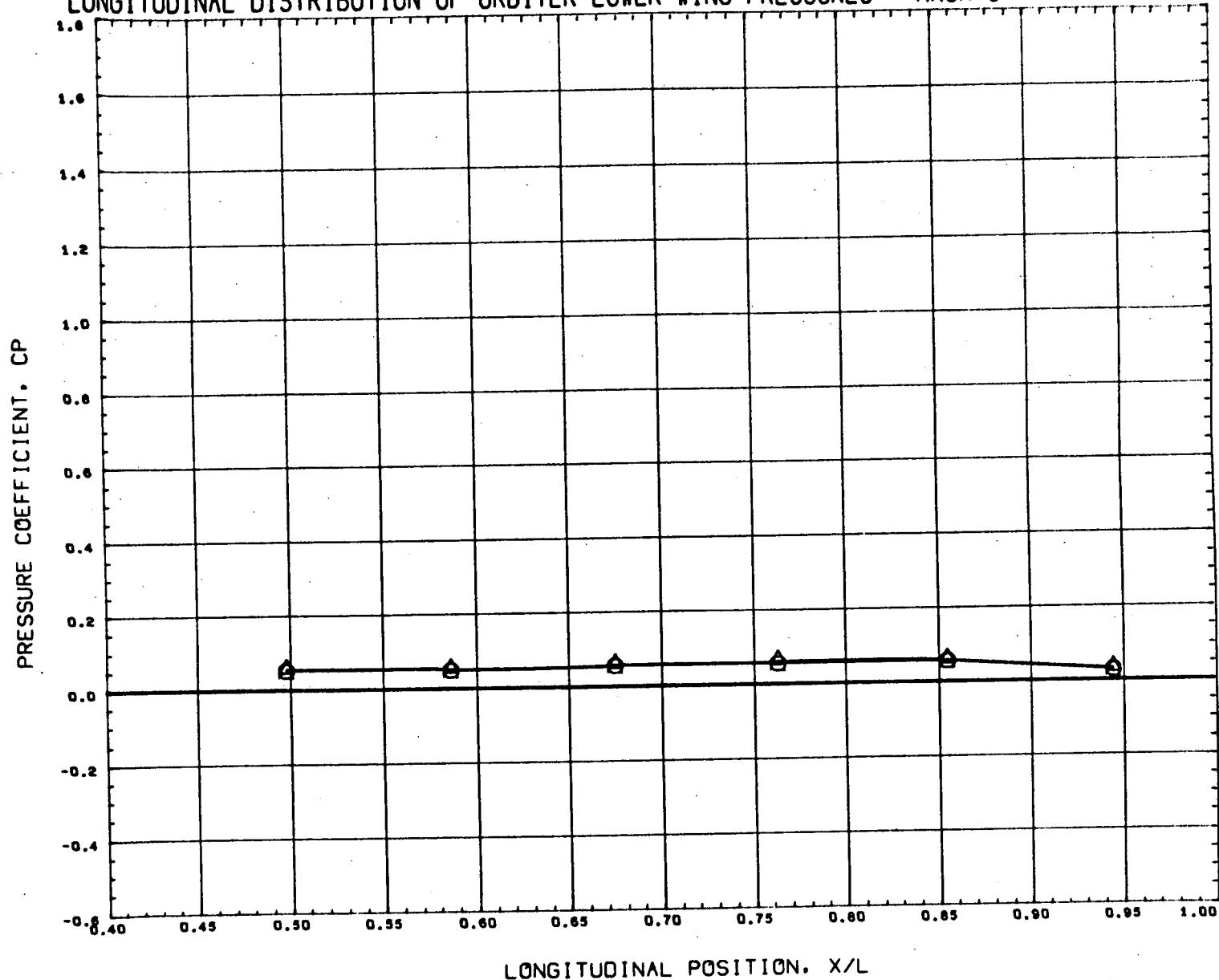
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8324•

PAGE 320

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O - 0.390 0.230 0.908
 D 0.511

LONGITUDINAL POSITION. X/L

PARAMETRIC VALUES
 ALPHAB 5.020 MACH 3.000
 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

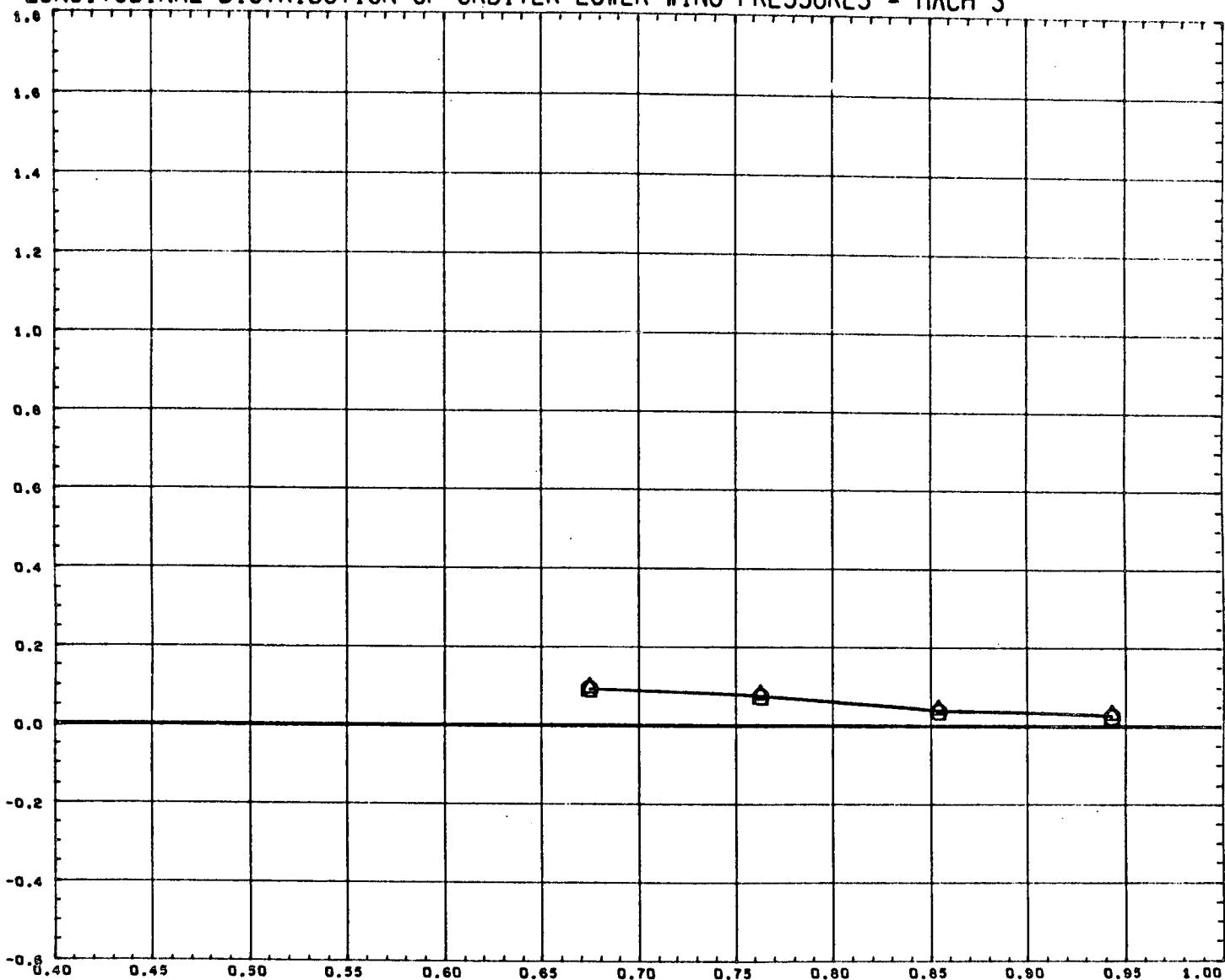
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 AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8324•

PAGE 321

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

SYMBOL DELTAX Y/B DELTAZ
 \square - 0.390 0.399 0.908
 \triangle 0.511

PARAMETRIC VALUES
 ALPHAB 5.020 MACH 3.000
 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

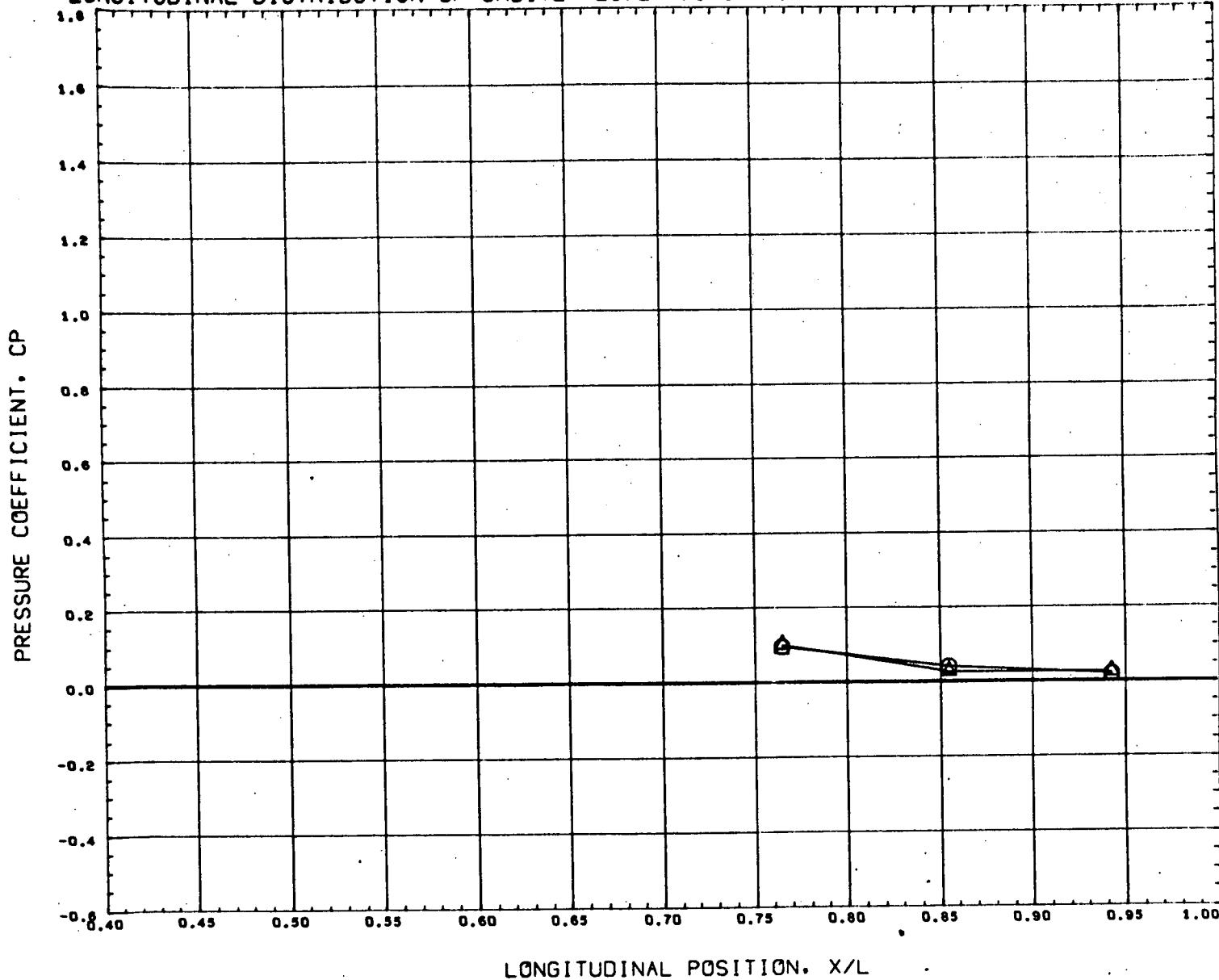
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8324•

PAGE 322

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



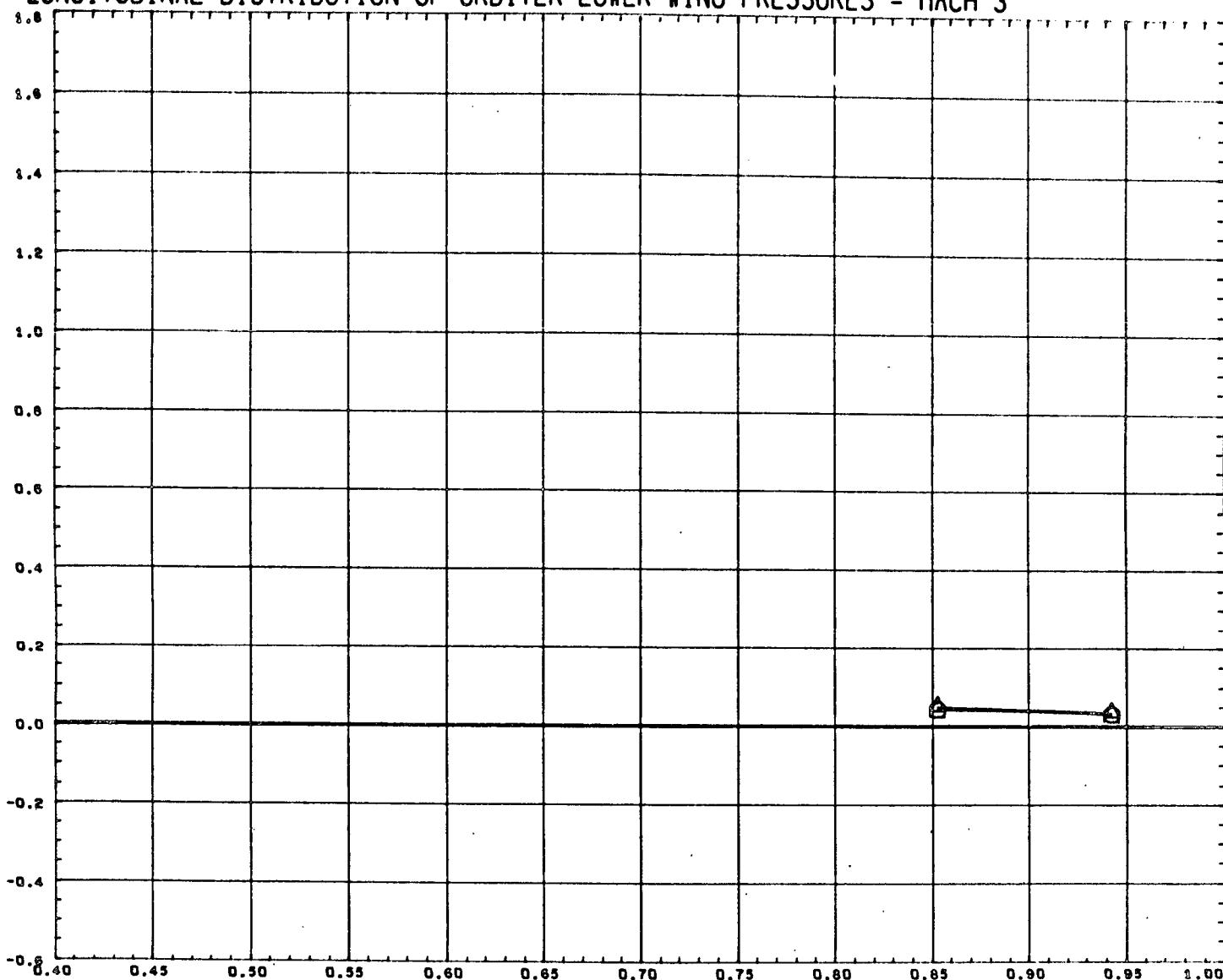
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8324•

PAGE 323

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

SYMBOL DELTAX Y/B DELTAZ

Δ - 0.390 0.738 0.908

Δ - 0.511

PARAMETRIC VALUES

| | | | |
|--------|-------|--------|-------|
| ALPHAB | 5.020 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

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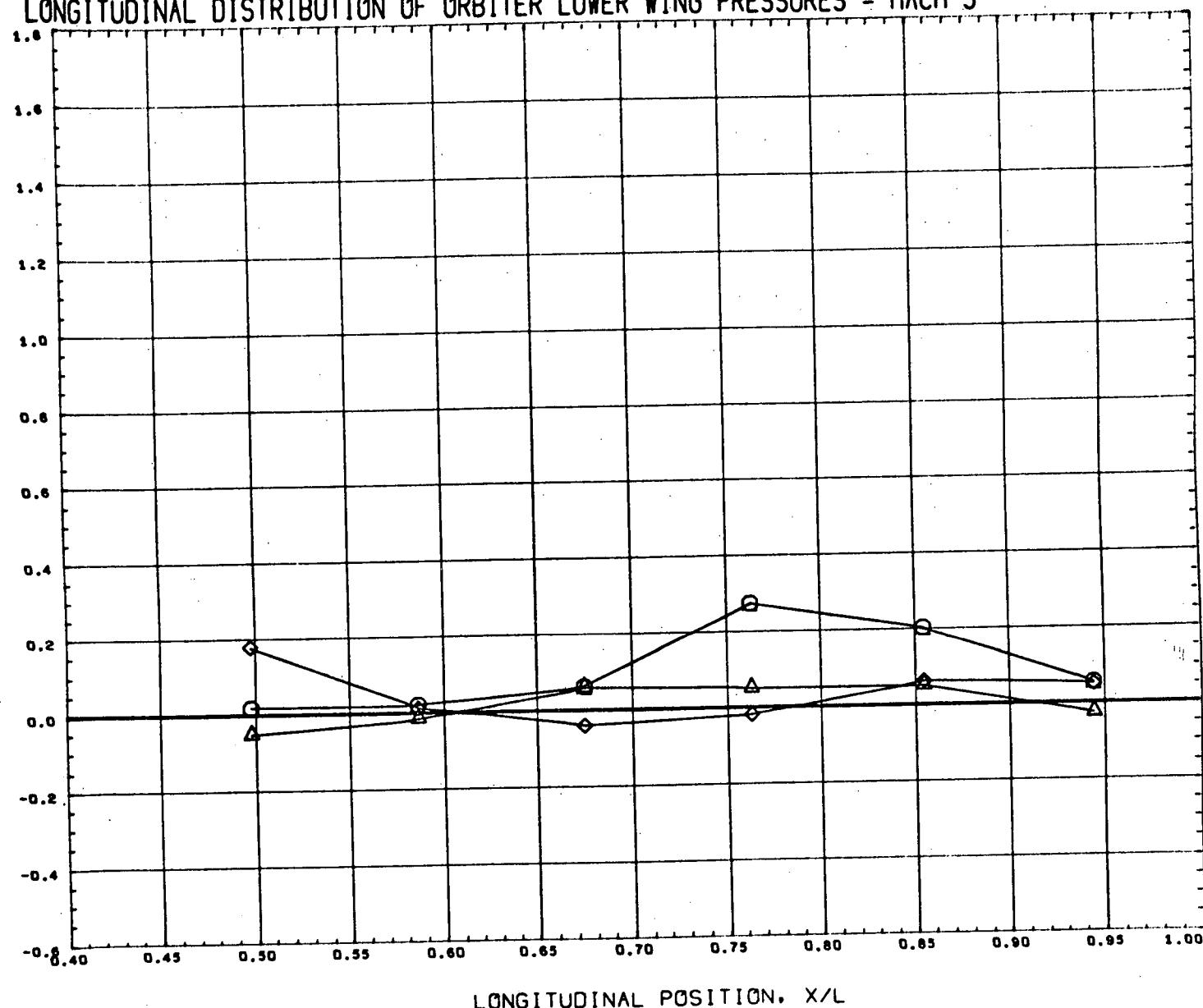
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8324•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| - | 0.143 | 0.230 | 0.120 |
| △ | 0.101 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|--------|
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| ALPHAI | 0.000 | ORBPOW |
| BSTPOW | 0.000 | |

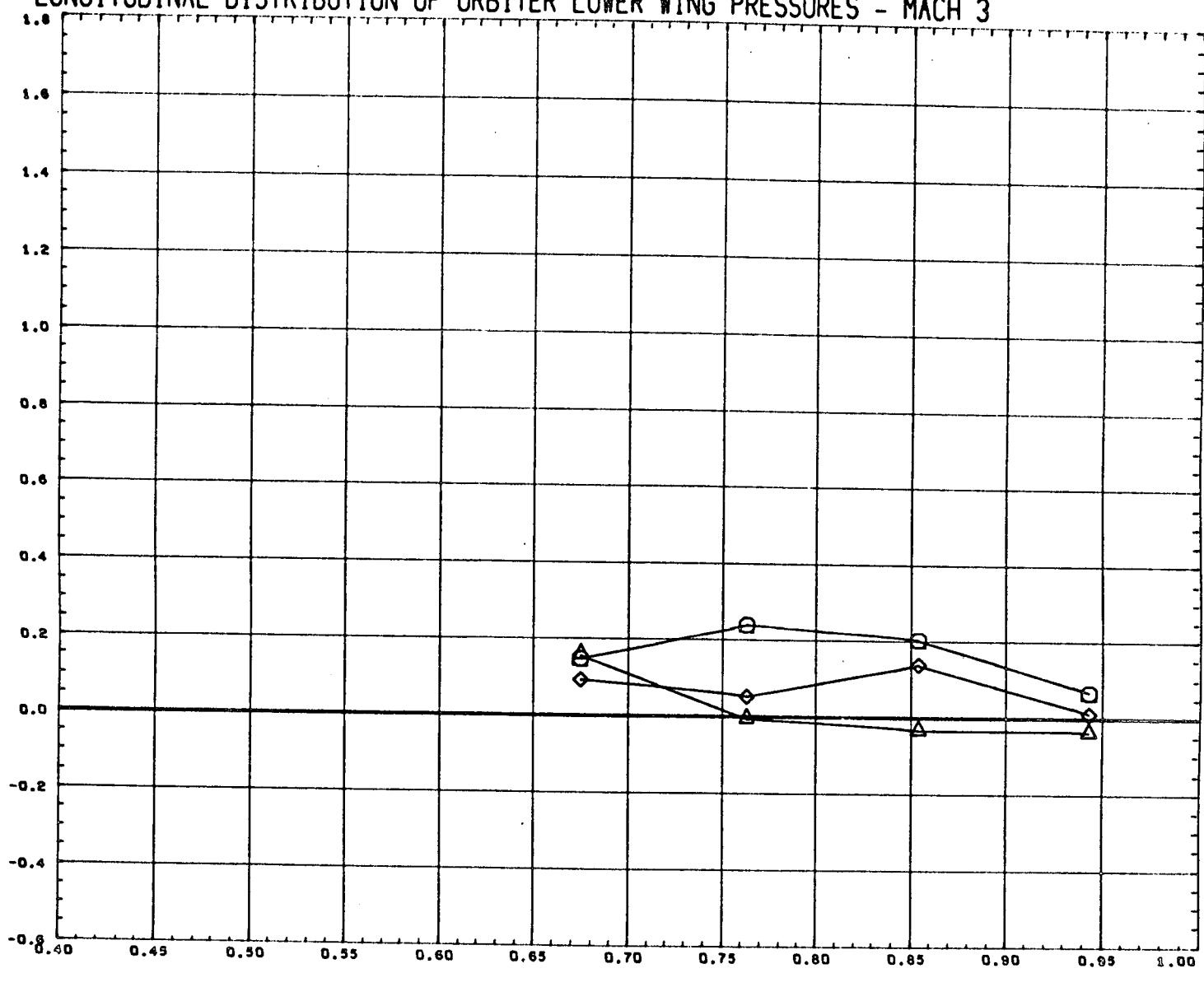
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8325•

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LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 0.399 | 0.120 |
| △ | 0.101 | | |
| ◊ | 0.226 | | |

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|--------|--------------|
| ALPHAB | 10.004 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

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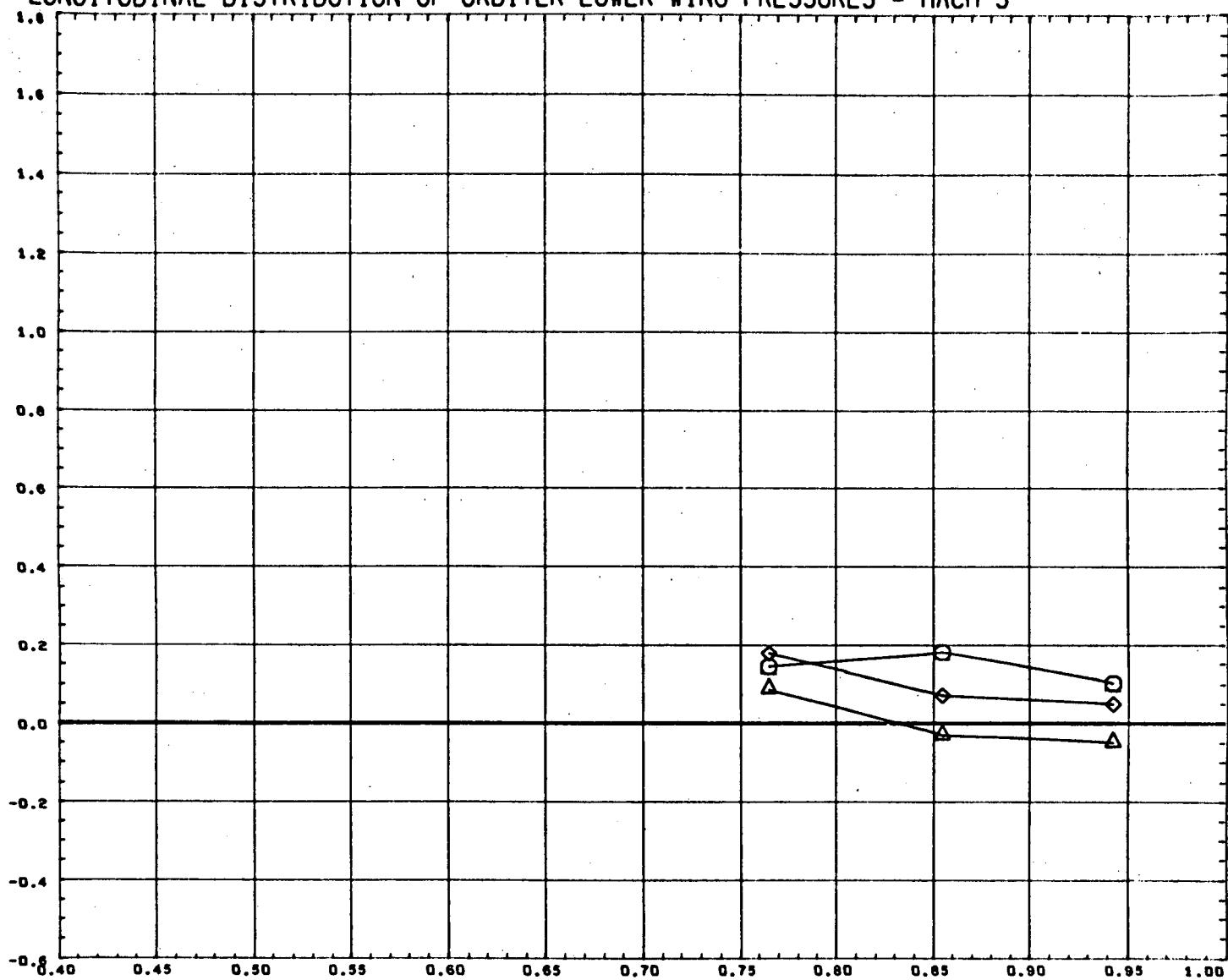
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8325•

PAGE 326

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 0.568 | 0.120 |
| △ | 0.101 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|--------------|
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| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

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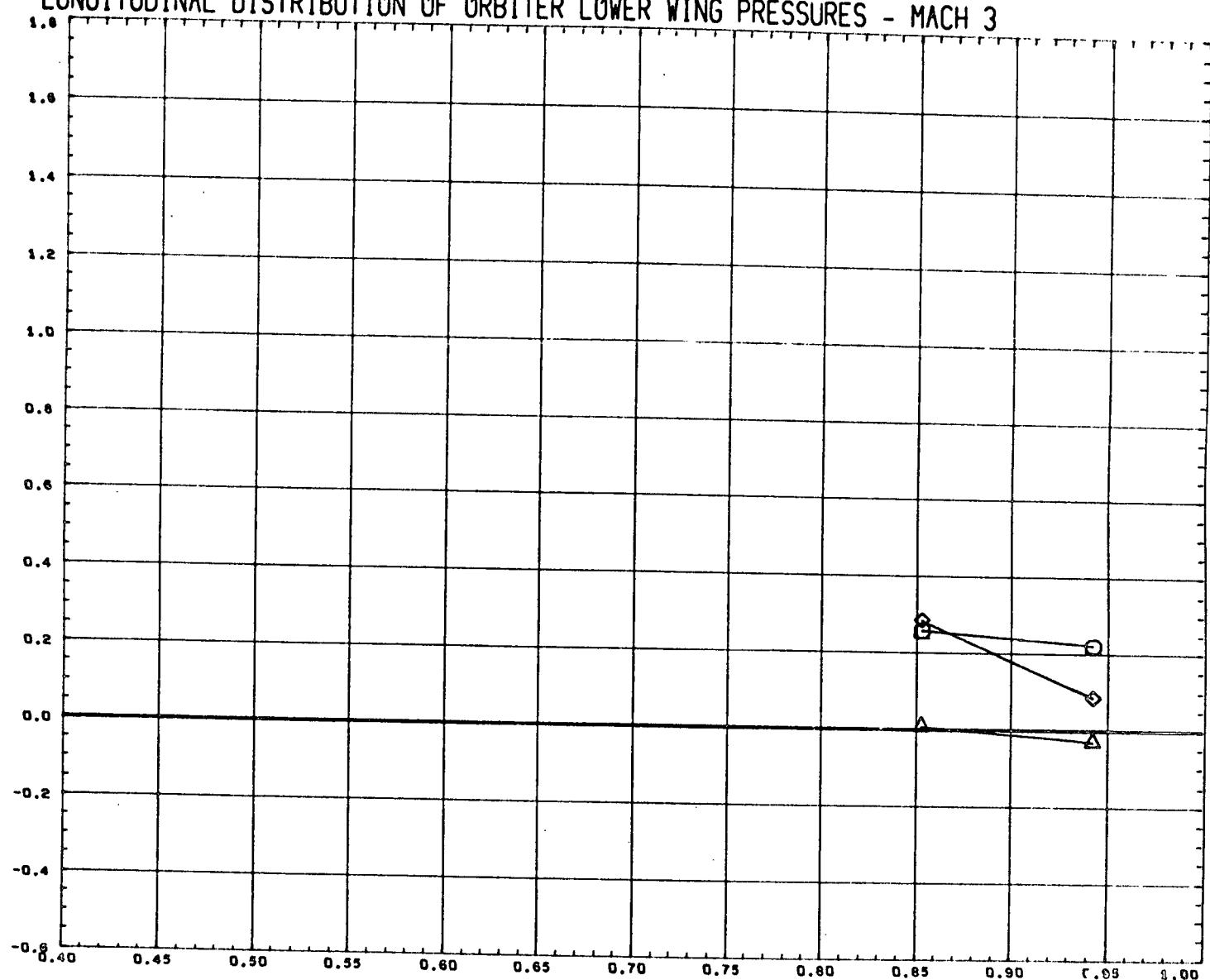
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8325•

PAGE 327

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/E | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 0.738 | 0.120 |
| △ | 0.101 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

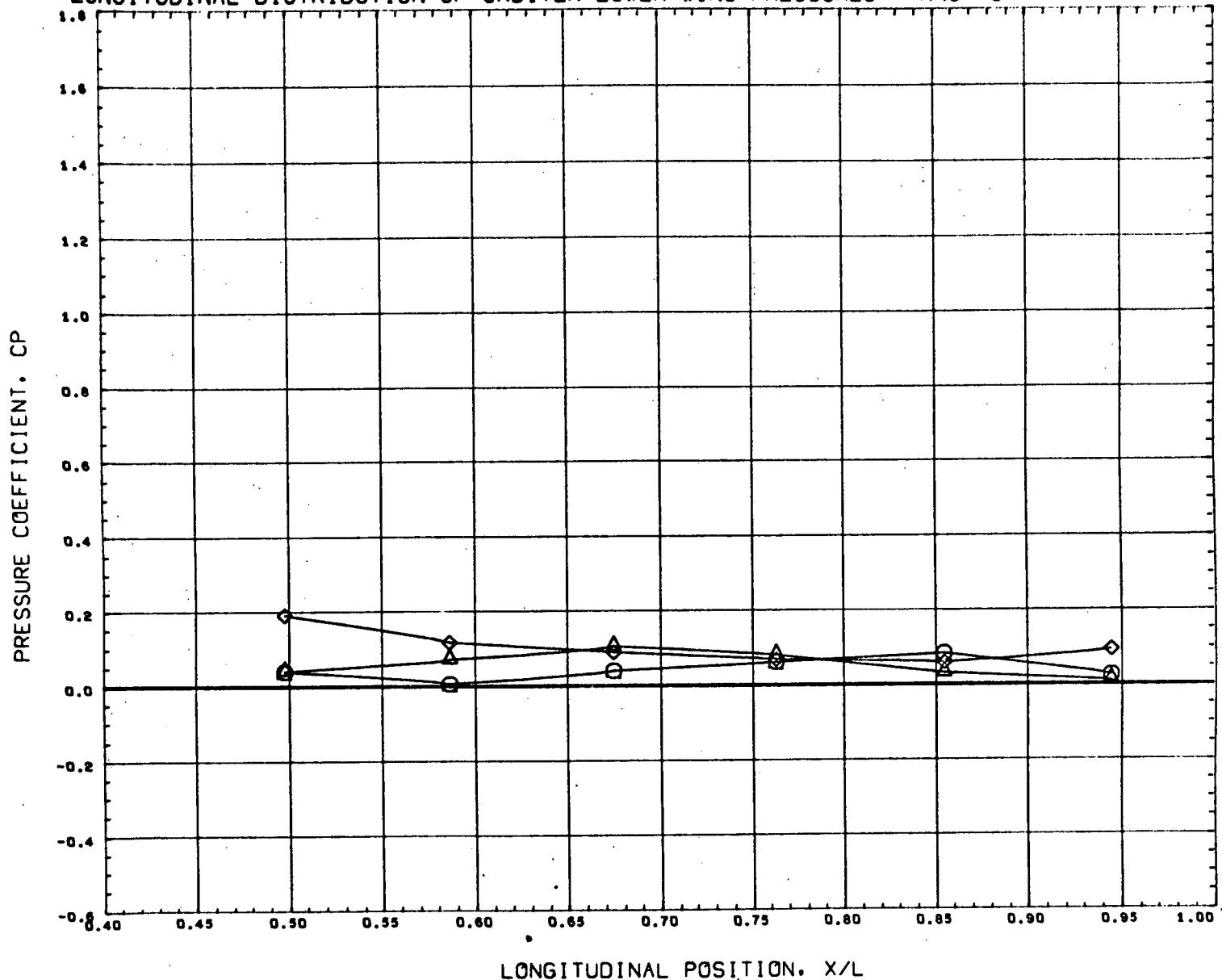
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8325•

PAGE 328

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



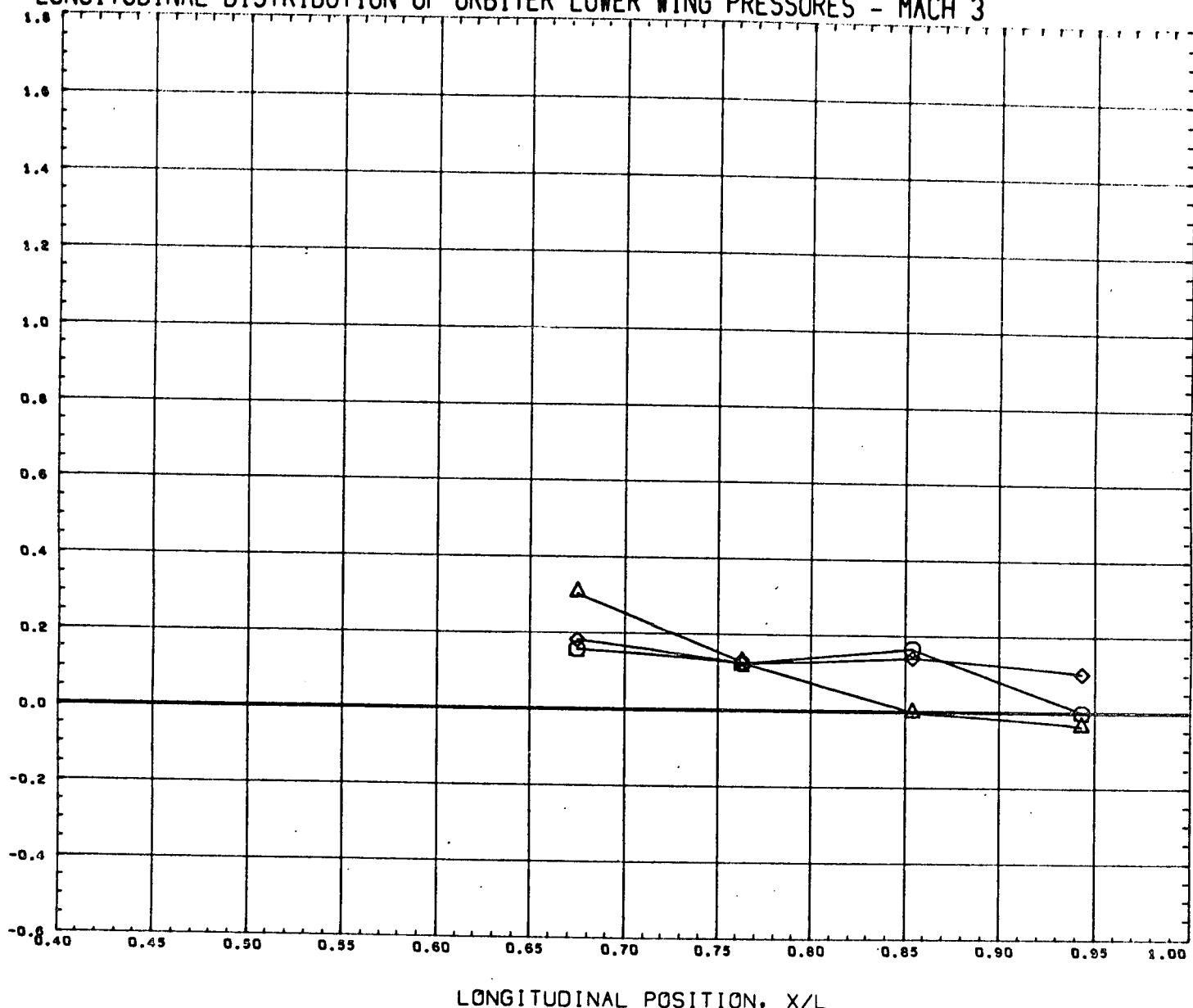
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 AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8325•

PAGE 329

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|-------------|--------|-------|--------|
| \triangle | -0.143 | 0.399 | 0.151 |
| \circ | 0.103 | | |
| \diamond | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|--------------|
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| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

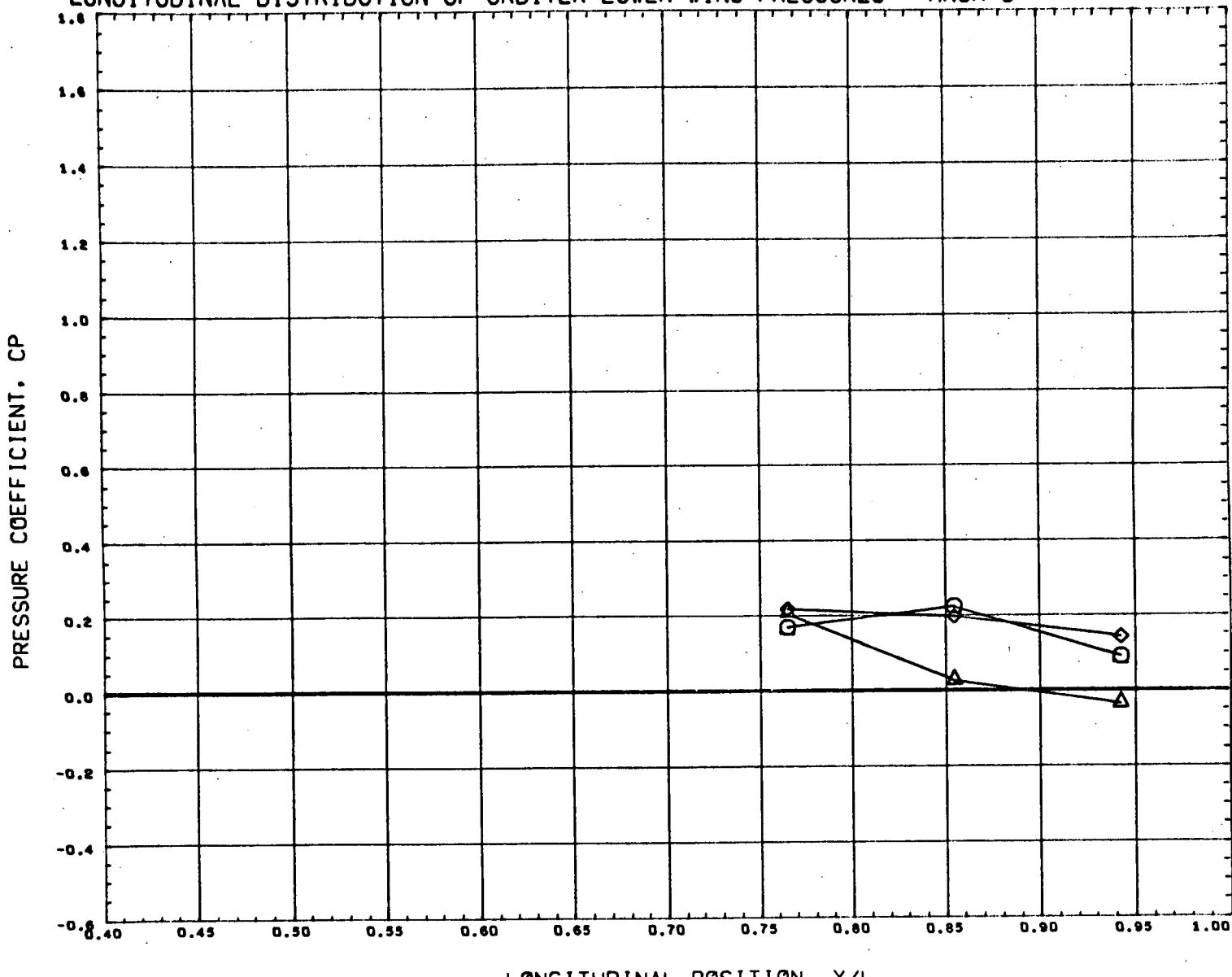
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8325•

PAGE 330

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 □ -0.143 0.568 0.151
 ▲ 0.103
 ◇ 0.226

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|-------|
| ALPHAB | 10.004 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

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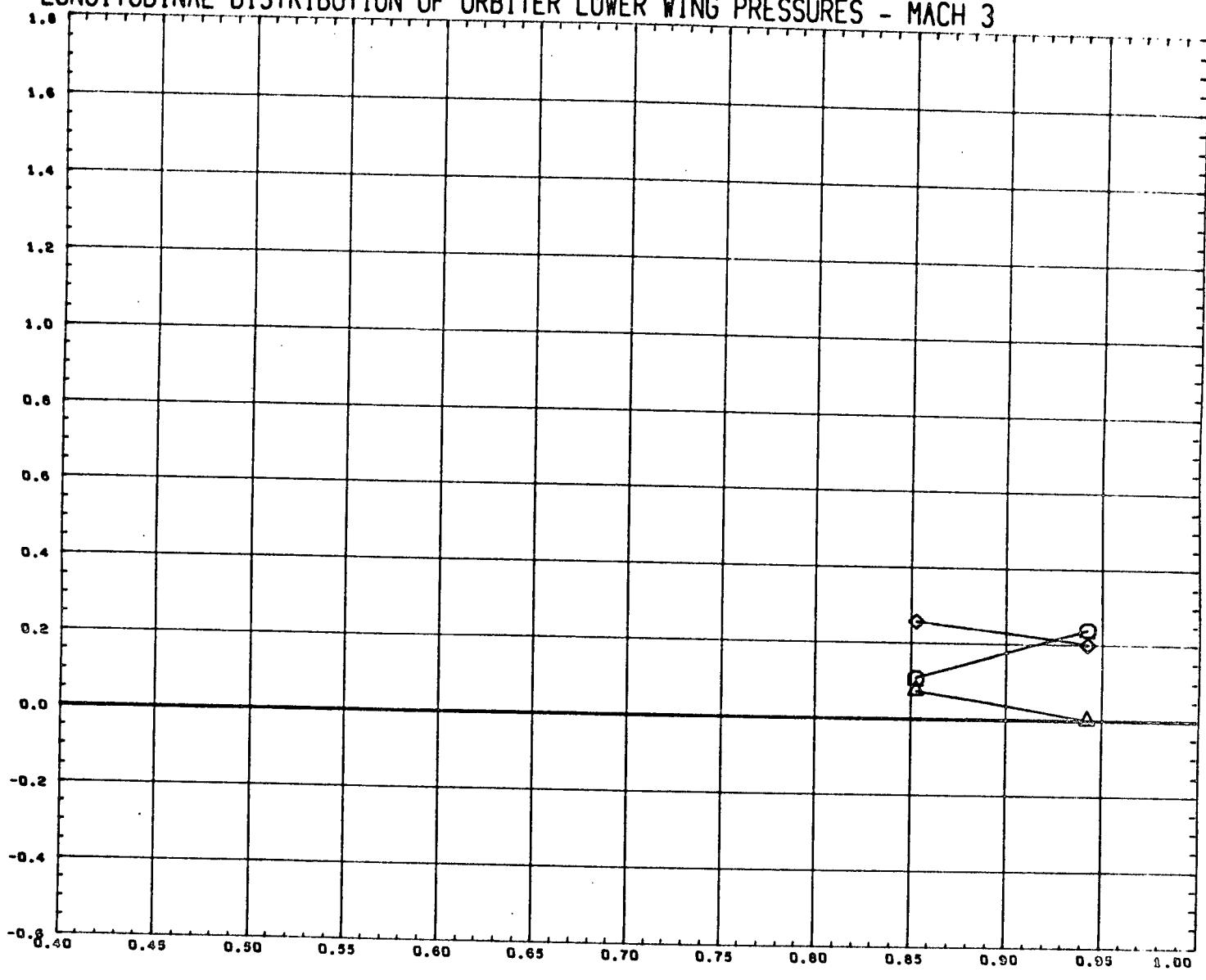
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8325•

PAGE 331

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ

△ - 0.143 0.738 0.151
 △ 0.103
 ◇ 0.226

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|-------|
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| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

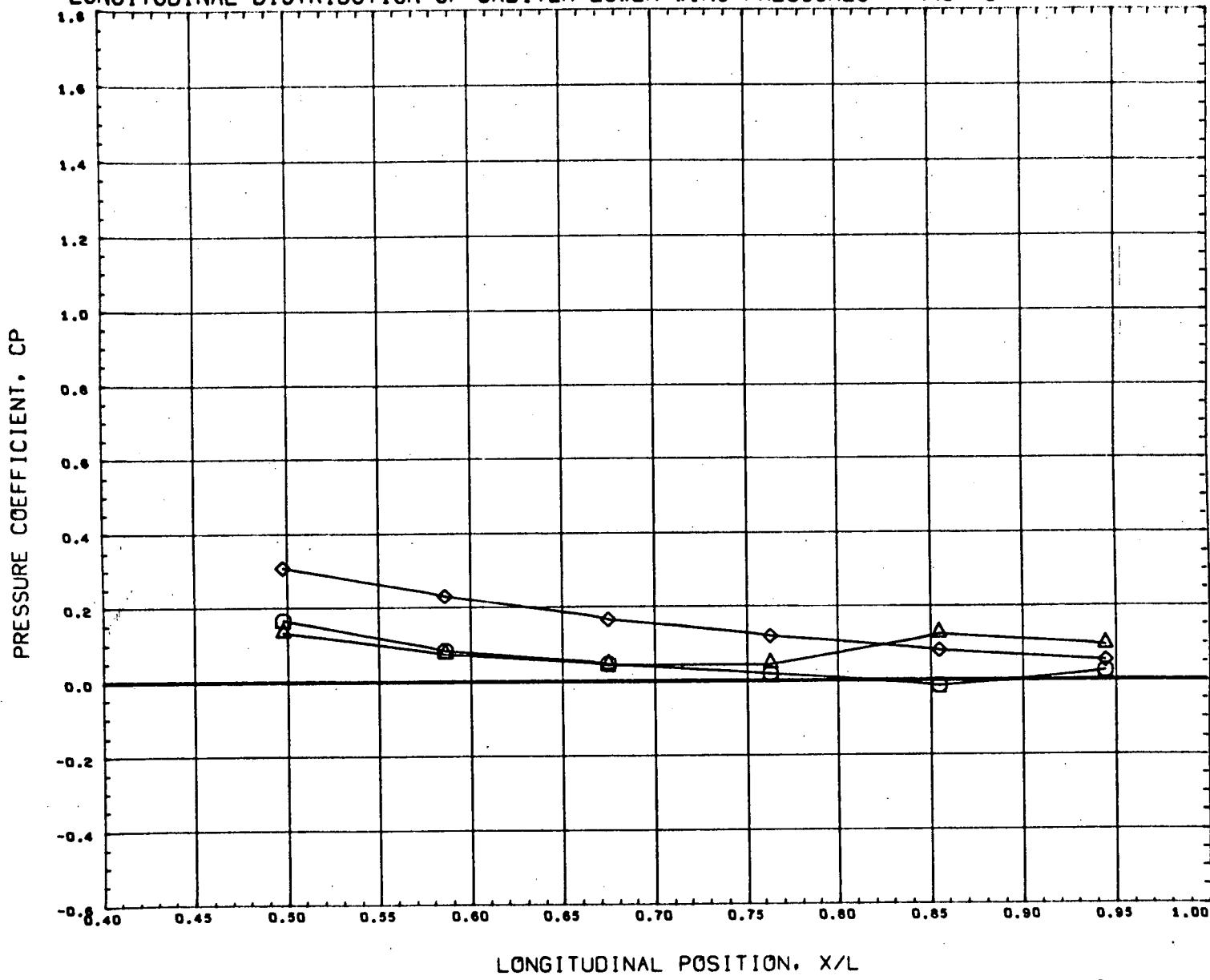
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8325•

PAGE 332

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 □ - 0.144 0.230 0.226
 △ 0.103 -
 ◇ 0.226

PARAMETRIC VALUES
 ALPHAB 10.004 MACH 3.000
 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

REFERENCE FILE

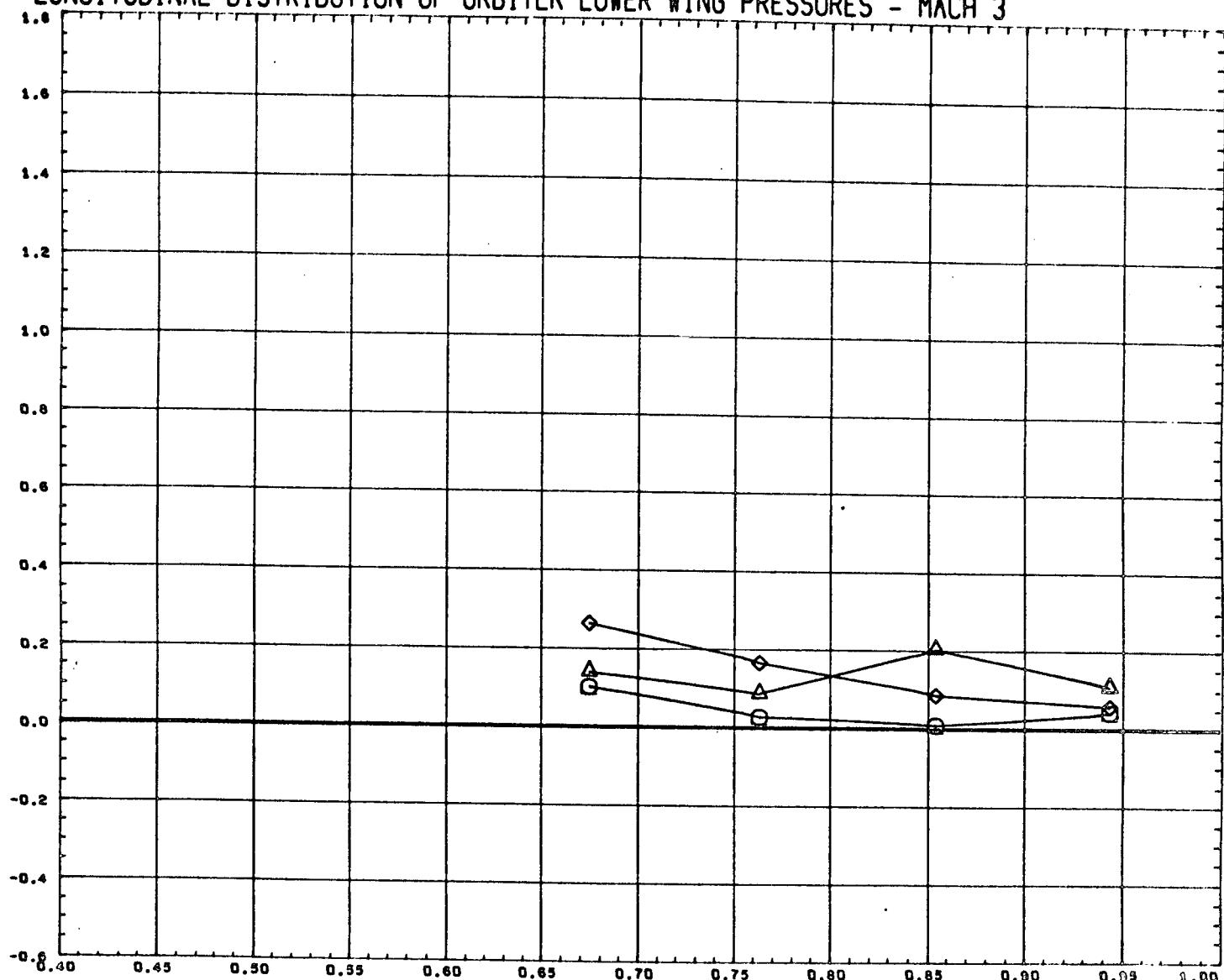
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8325•

PAGE 333

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.144 | 0.399 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|--------|
| ALPHAB | 10.004 | MACH |
| ALPHAI | 0.000 | ORBPOW |
| BSTPOW | 0.000 | |

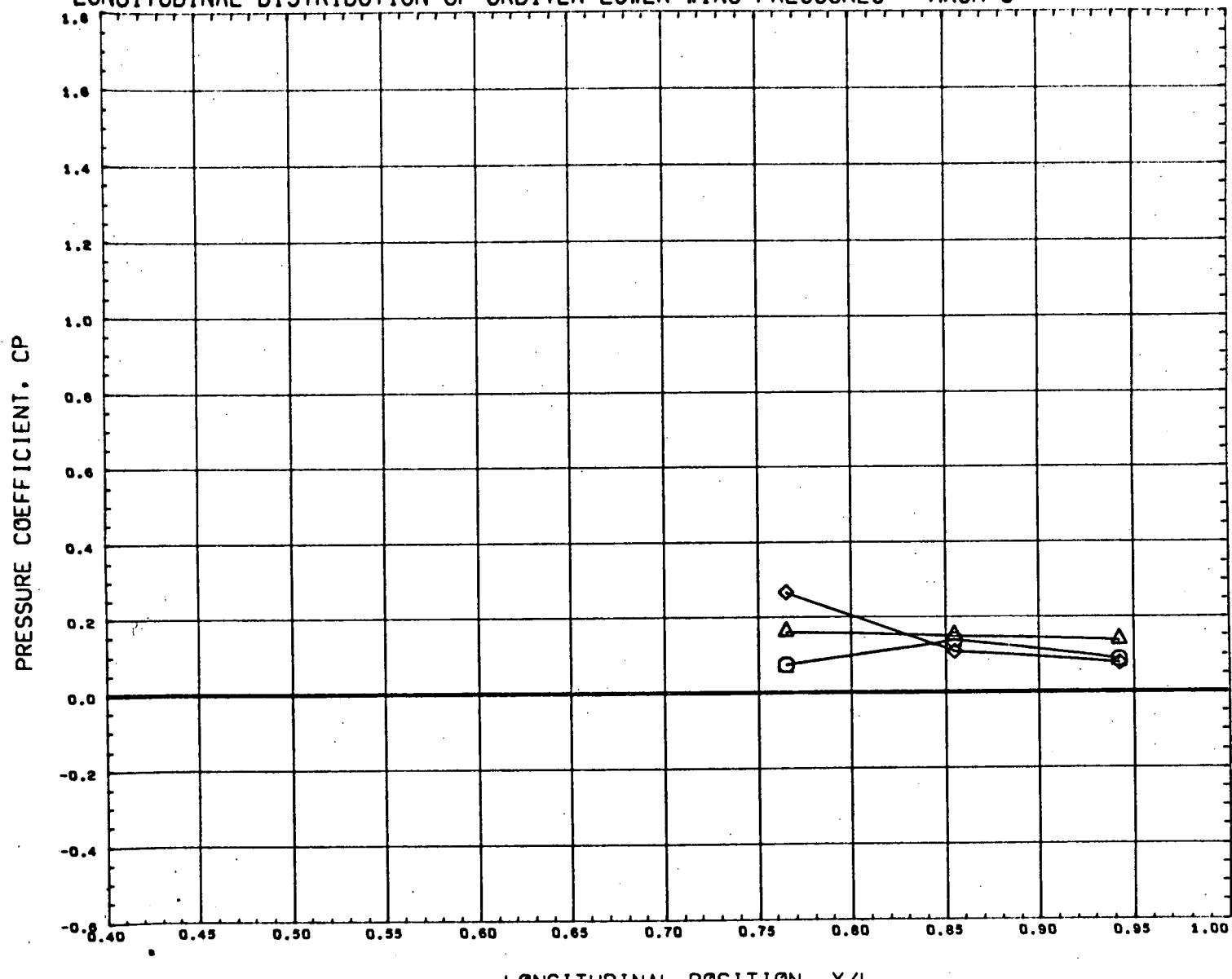
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8325•

PAGE 334

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O - 0.144 0.568 0.226
 △ - 0.103 0.568 0.226
 ◇ - 0.226 0.568 0.226

PARAMETRIC VALUES
 ALPHAB 10.004 MACH 3.000
 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

REFERENCE FILE

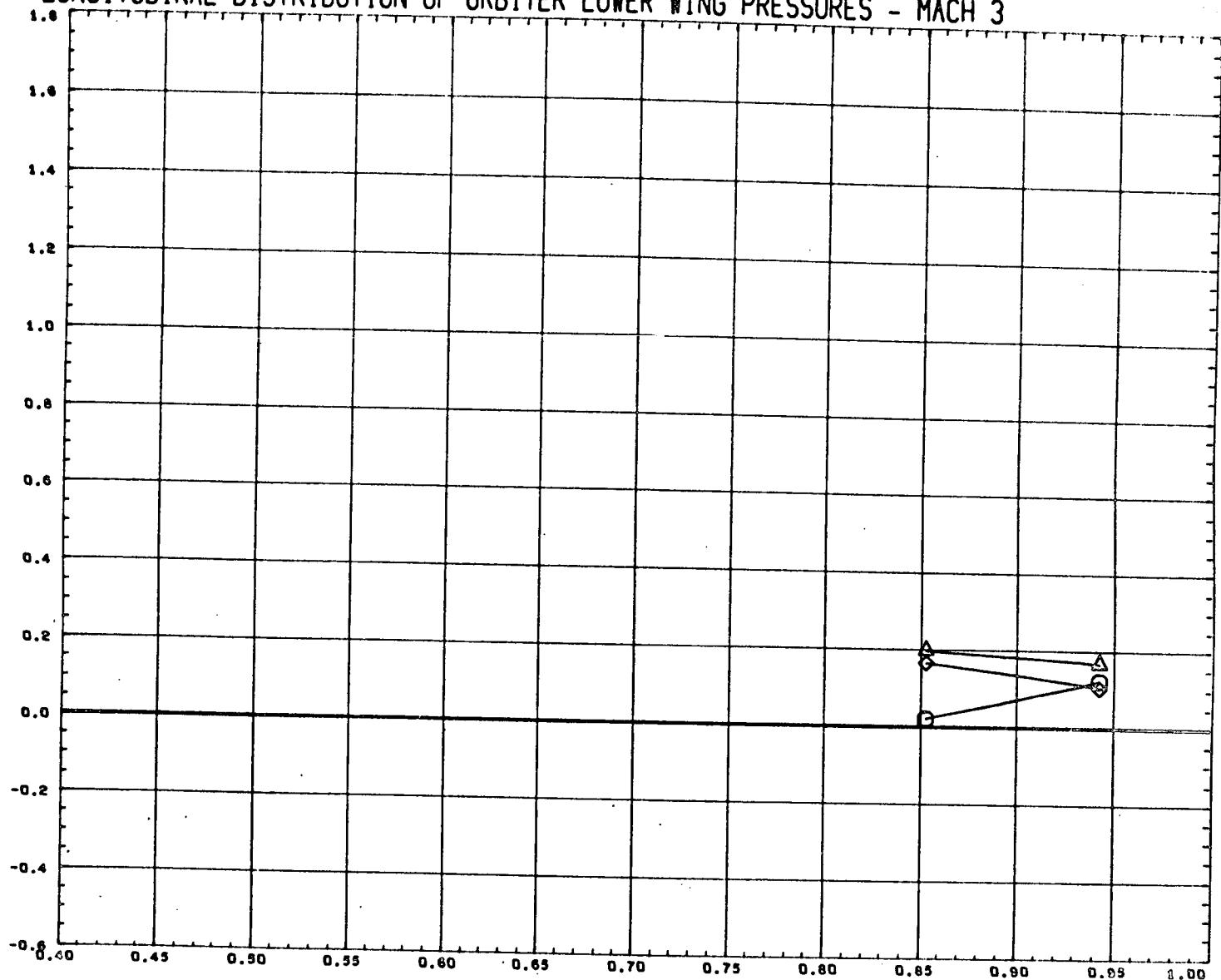
AEDC VAI163 MDAC ORBITER (LOWER WING)

•HT8325•

PAGE 335

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

SYMBOL DELTAX Y/B DELTAZ

- 0.144 0.738 0.228

◊ 0.103 0.226

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|-------|
| ALPHAB | 10.004 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

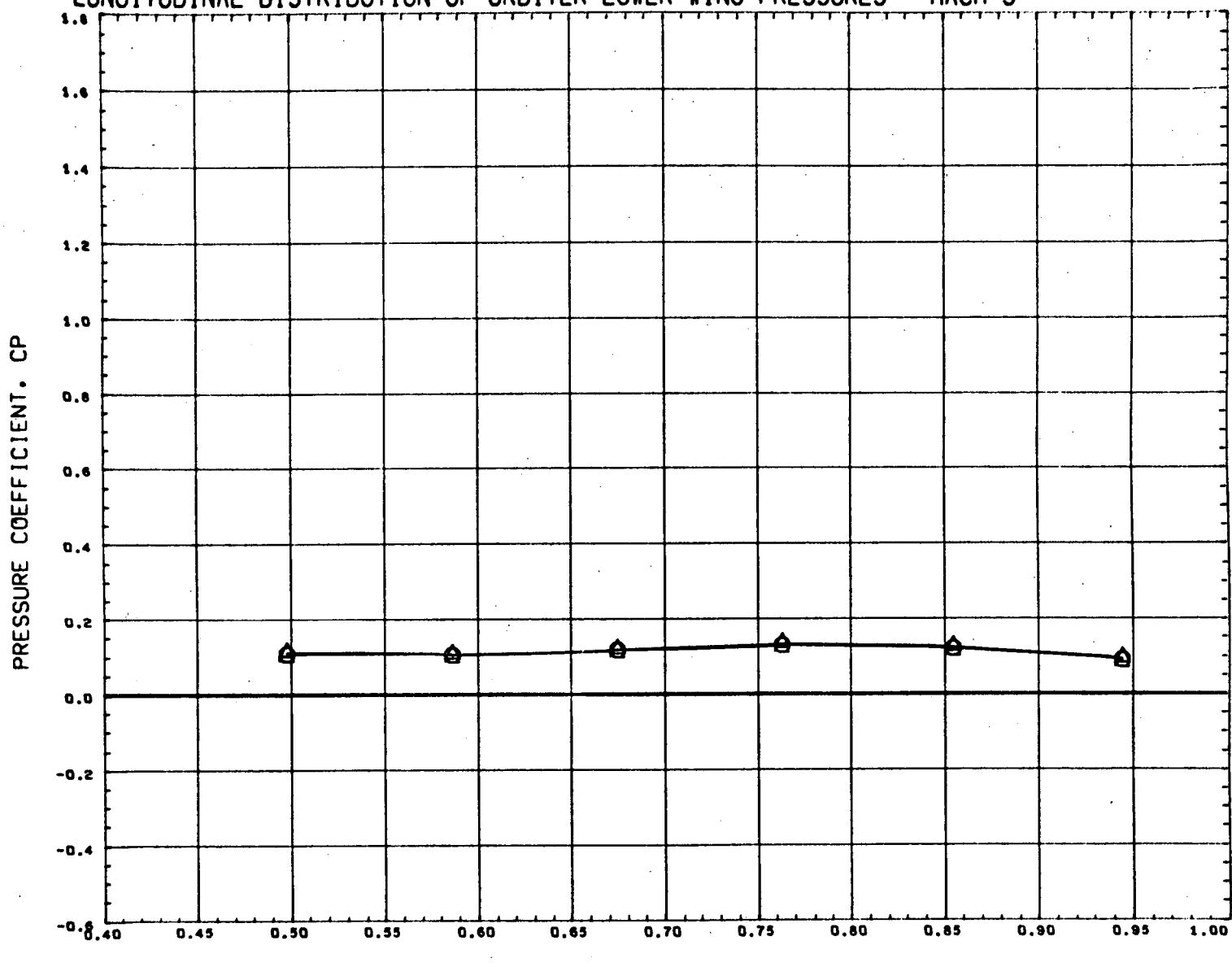
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•HT8325•

PAGE 336

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



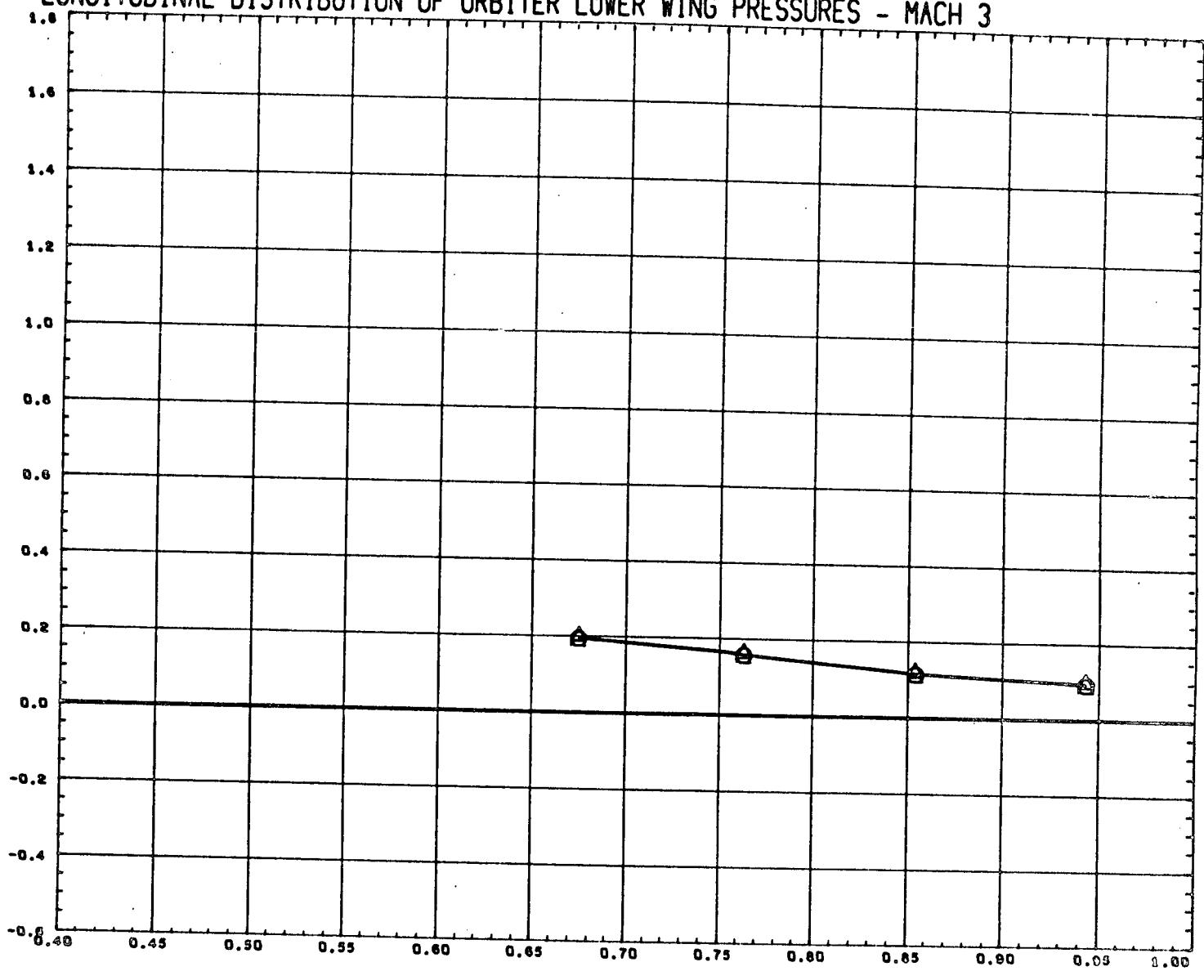
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•HT8325•

PAGE 337

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
 O - 0.390 0.399 0.908
 △ 0.481

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|--------|-----------------|
| ALPHAB | 10.004 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

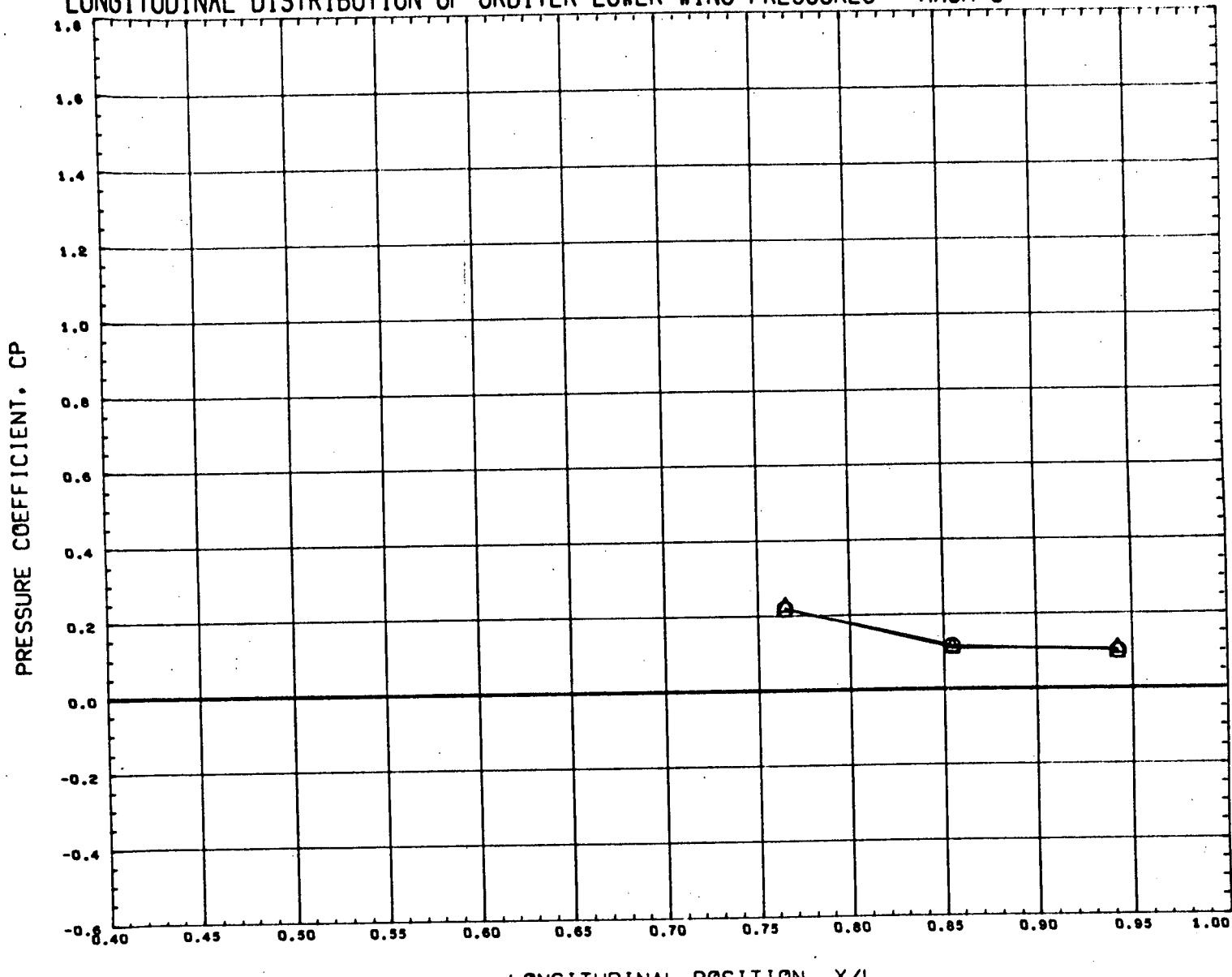
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8325•

PAGE 338

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 O - 0.390 0.568 0.908
 A 0.481

LONGITUDINAL POSITION. X/L

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|-------|
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

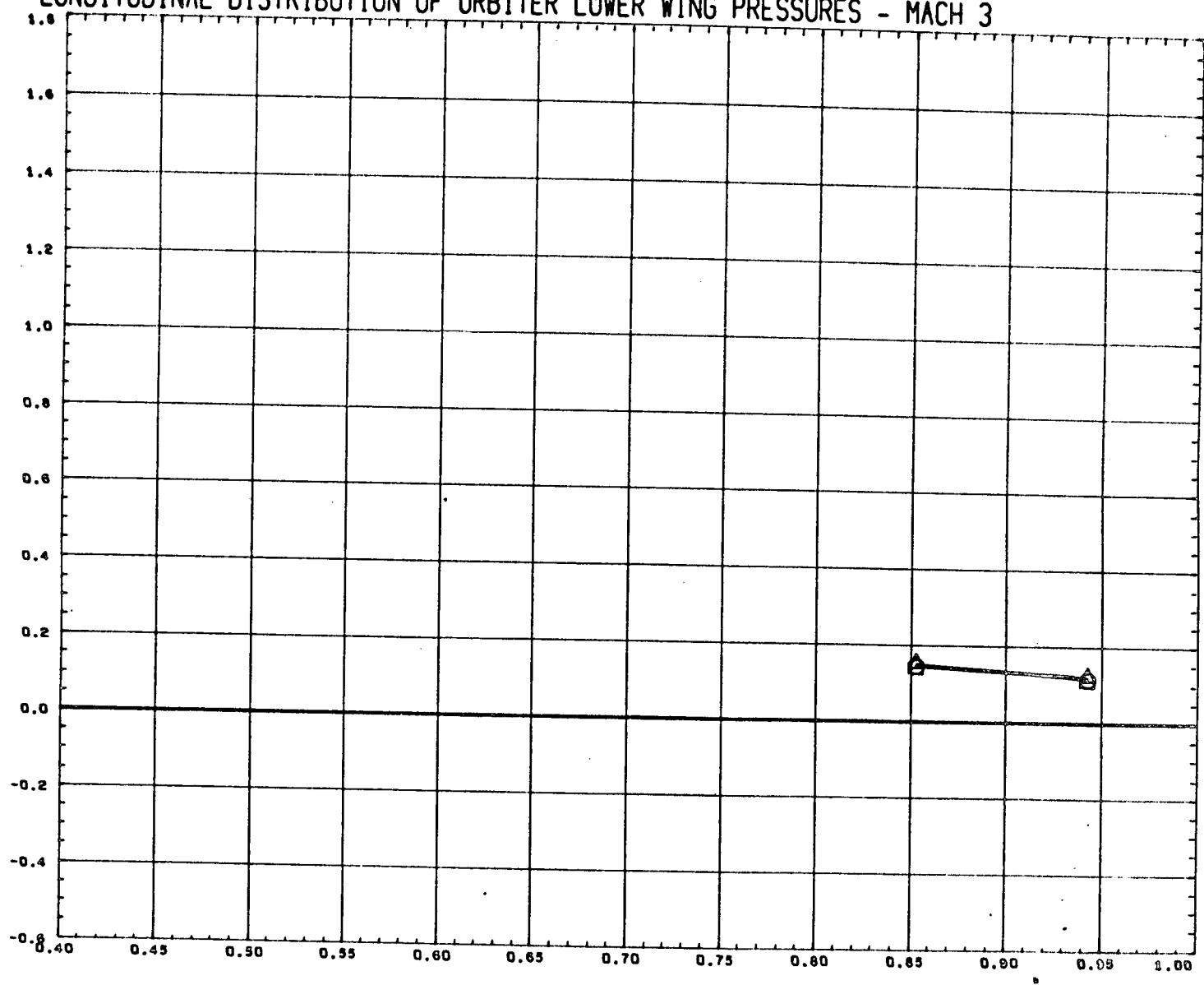
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 AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8325•

PAGE 339

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX Y/B DELTAZ
- 0.390 0.738 0.908
0.481

LONGITUDINAL POSITION, X/L

| PARAMETRIC VALUES | | |
|-------------------|--------|--------------|
| ALPHAB | 10.004 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

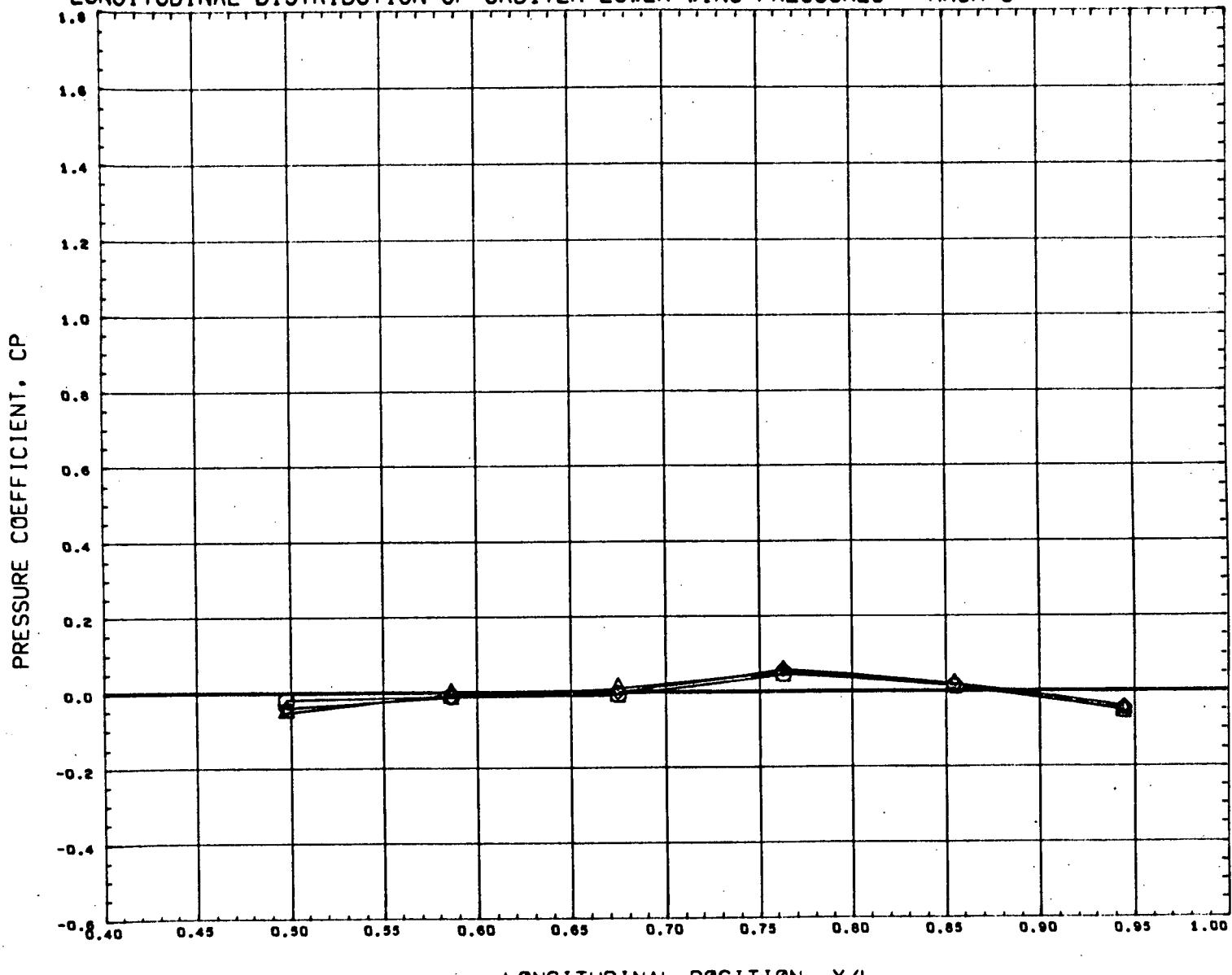
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8325•

PAGE 340

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

□ 0.040 0.230 0.105

△ 0.103 0.166

PARAMETRIC VALUES

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|-------|
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

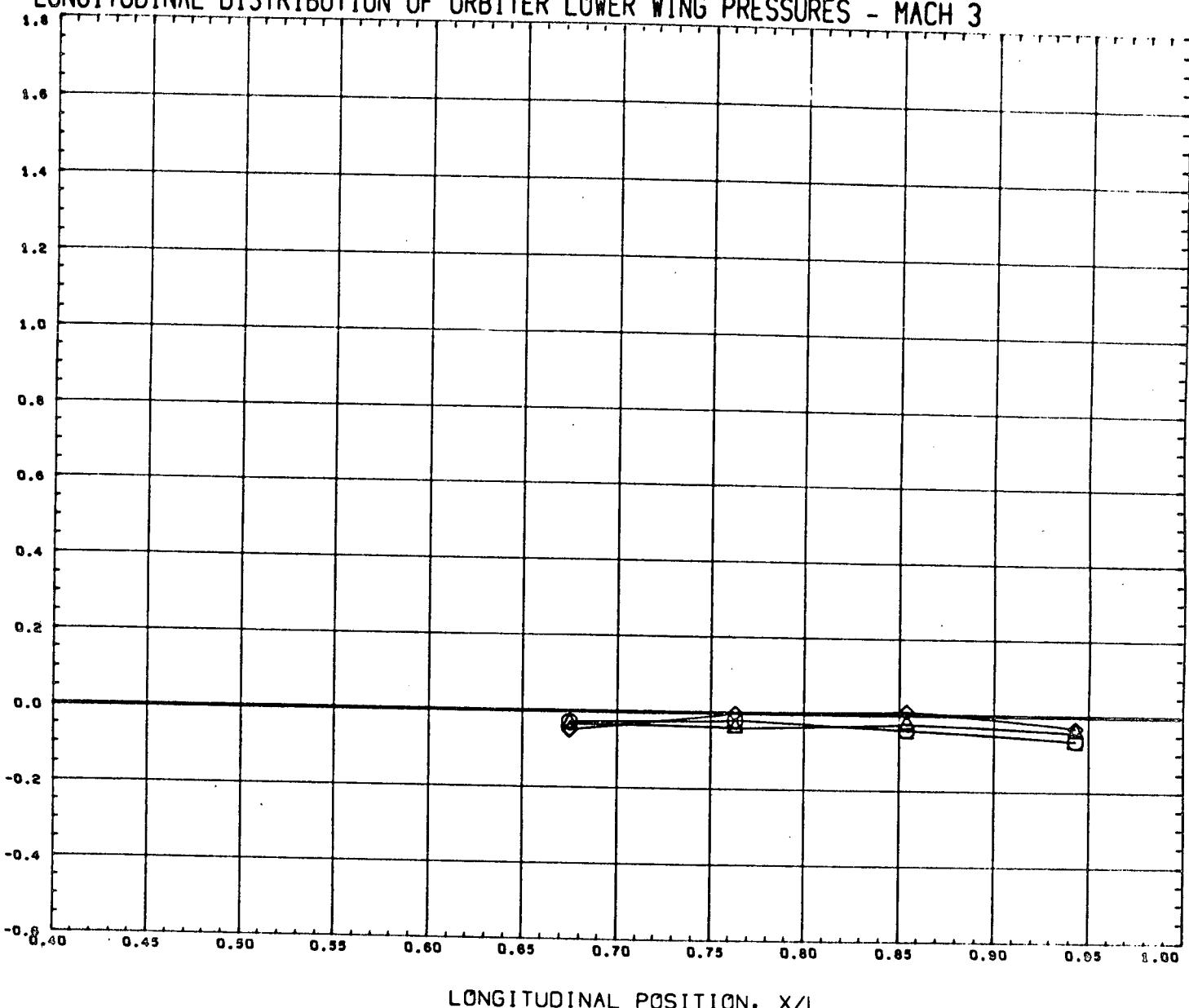
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8331•

PAGE 341

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | 0.040 | 0.399 | 0.105 |
| ▷ | 0.103 | | |
| ◊ | 0.166 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 9.980 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

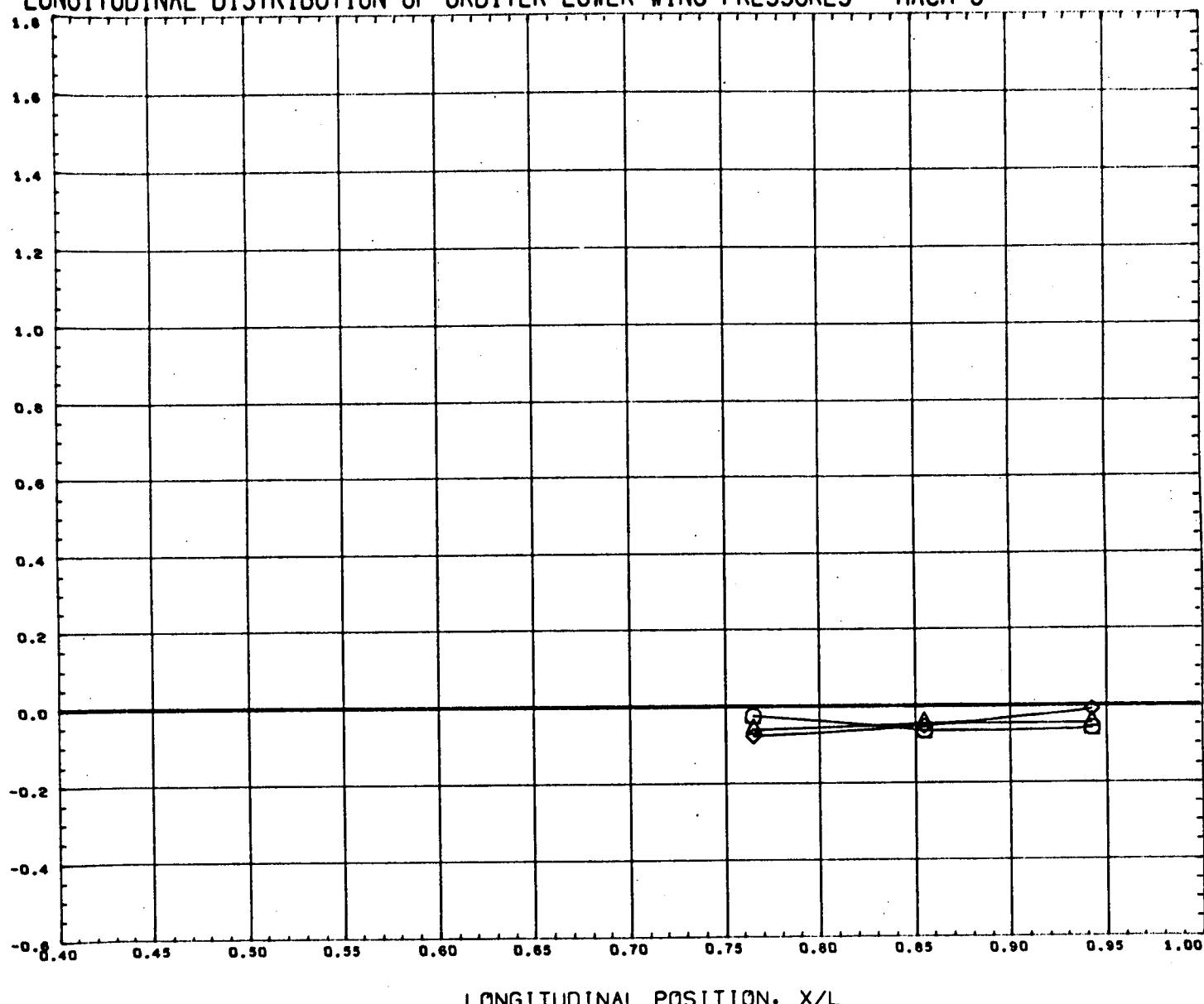
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8331•

PAGE 342

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ○ | 0.040 | 0.568 | 0.105 |
| △ | 0.103 | | |
| ◊ | 0.166 | | |

| PARAMETRIC VALUES | | | |
|-------------------|-------|--------|-------|
| ALPHAB | - | 9.980 | |
| ALPHAI | 0.000 | MACH | 3.000 |
| BSTPOW | 0.000 | ORBPOW | 0.000 |

REFERENCE FILE

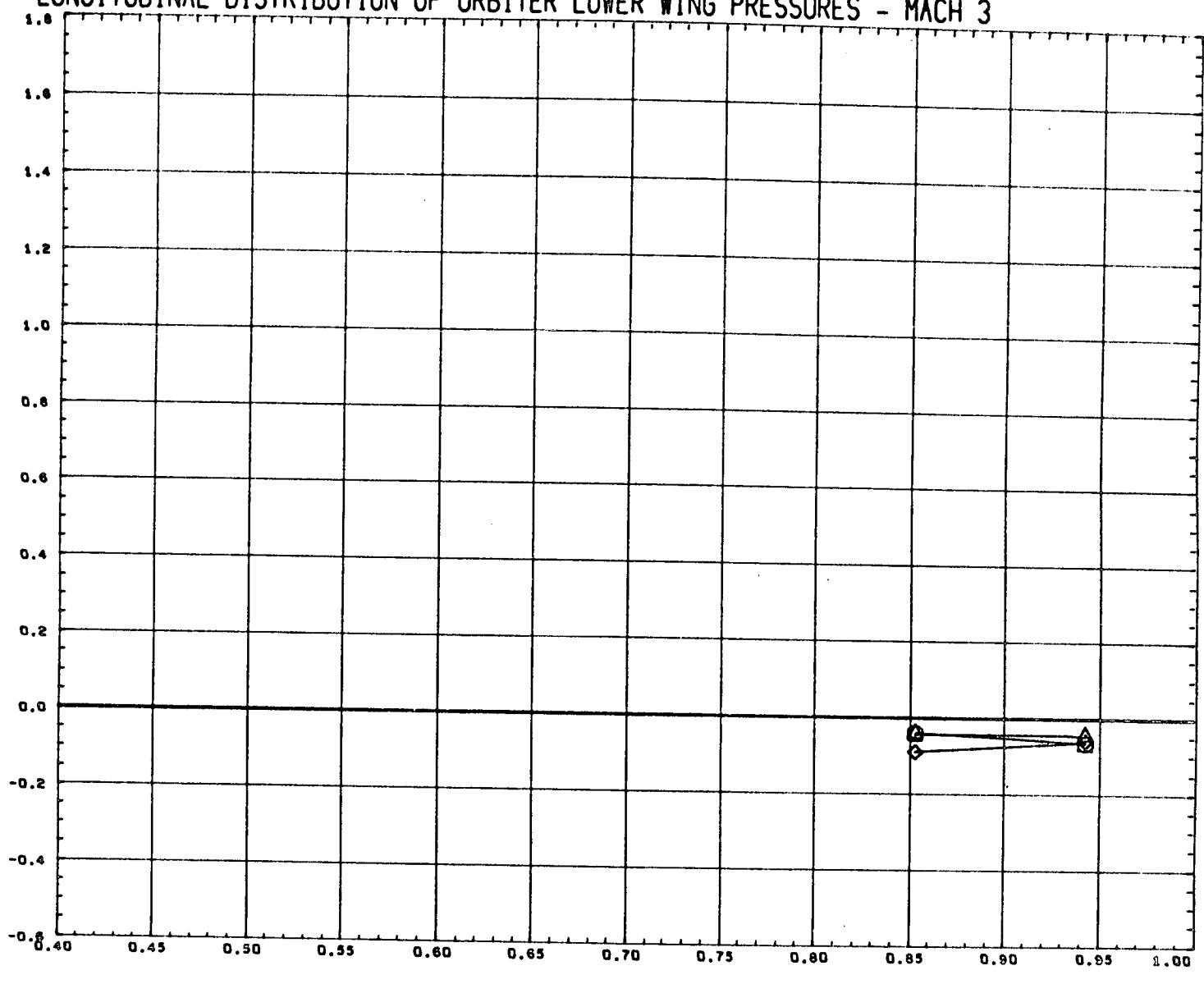
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8331•

PAGE 343

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | 0.040 | 0.738 | 0.105 |
| △ | 0.103 | | |
| ◊ | 0.166 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 9.980 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

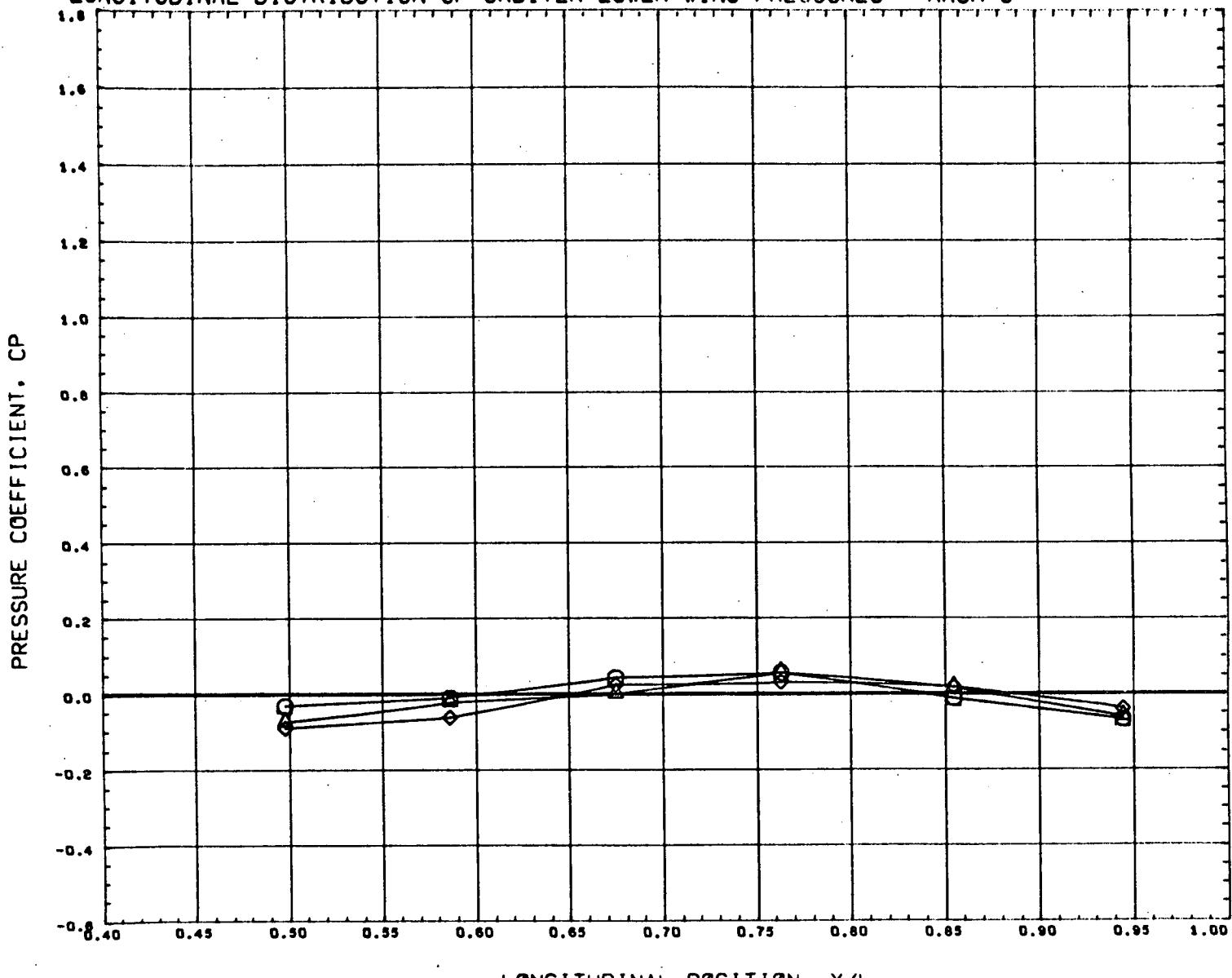
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8331•

PAGE 344

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ
 ◻ 0.036 0.230 0.105
 △ 0.101 0.161
 ◇ 0.161

LONGITUDINAL POSITION. X/L

| PARAMETRIC VALUES | | |
|-------------------|--------|-------|
| ALPHAB | = | 4.950 |
| ALPHAT | = | 0.000 |
| BSTPOW | = | 0.000 |
| | MACH | 3.000 |
| | ORBPOW | 0.000 |

REFERENCE FILE

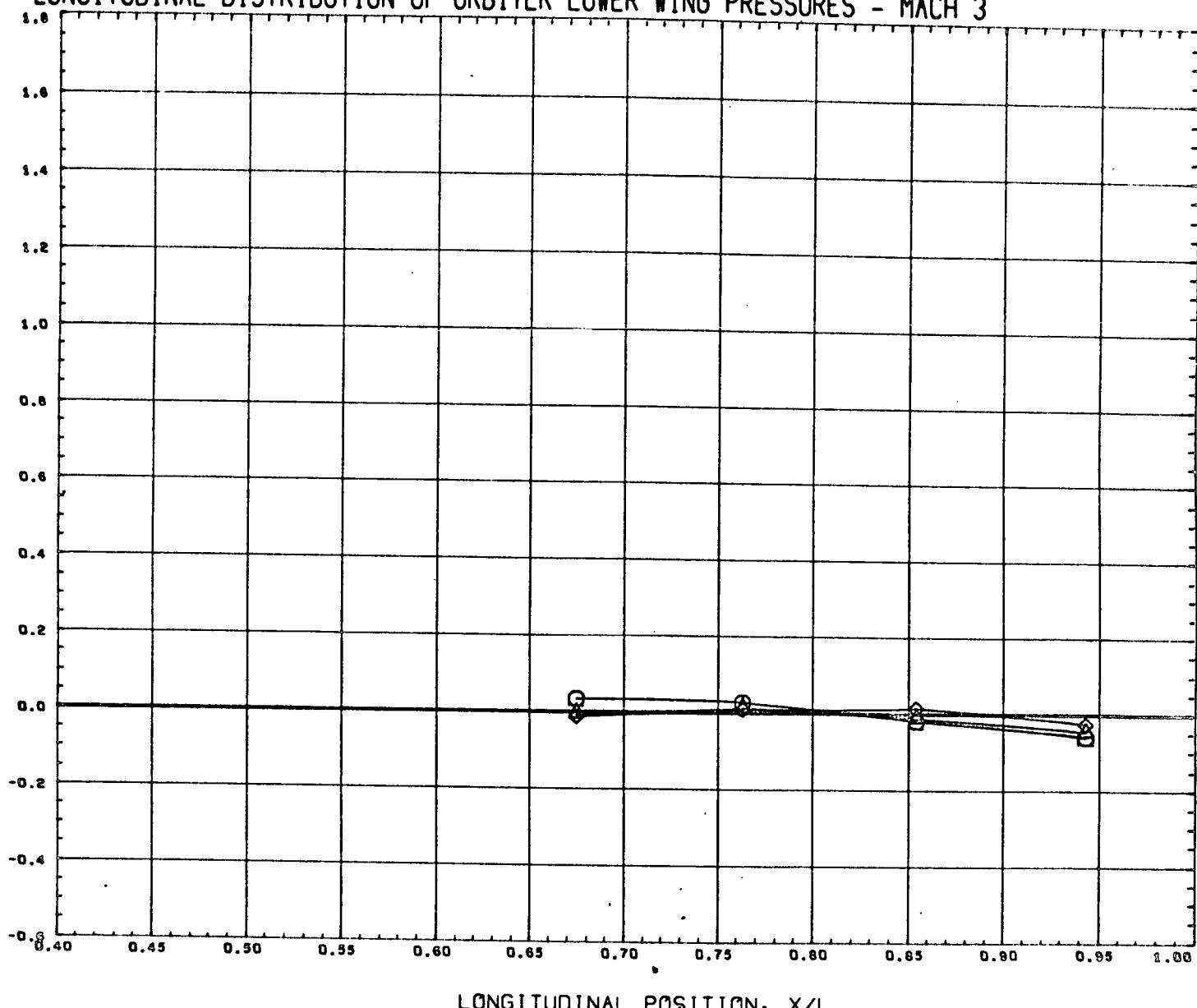
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8332•

PAGE 345

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ○ | 0.038 | 0.399 | 0.105 |
| △ | 0.101 | | |
| ◊ | 0.161 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|-------|
| ALPHAB | - 4.950 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

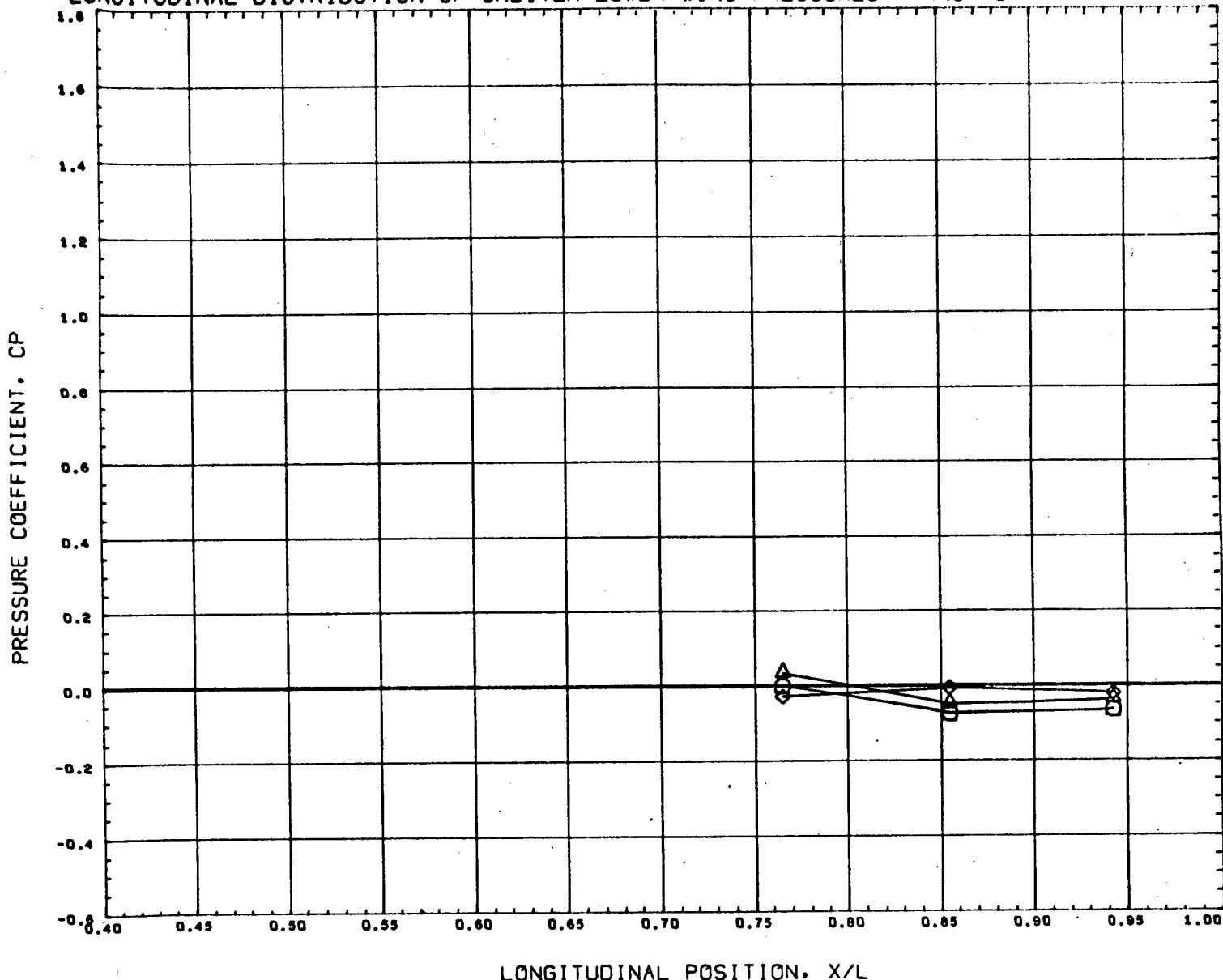
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8332•

PAGE 346

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



REFERENCE FILE

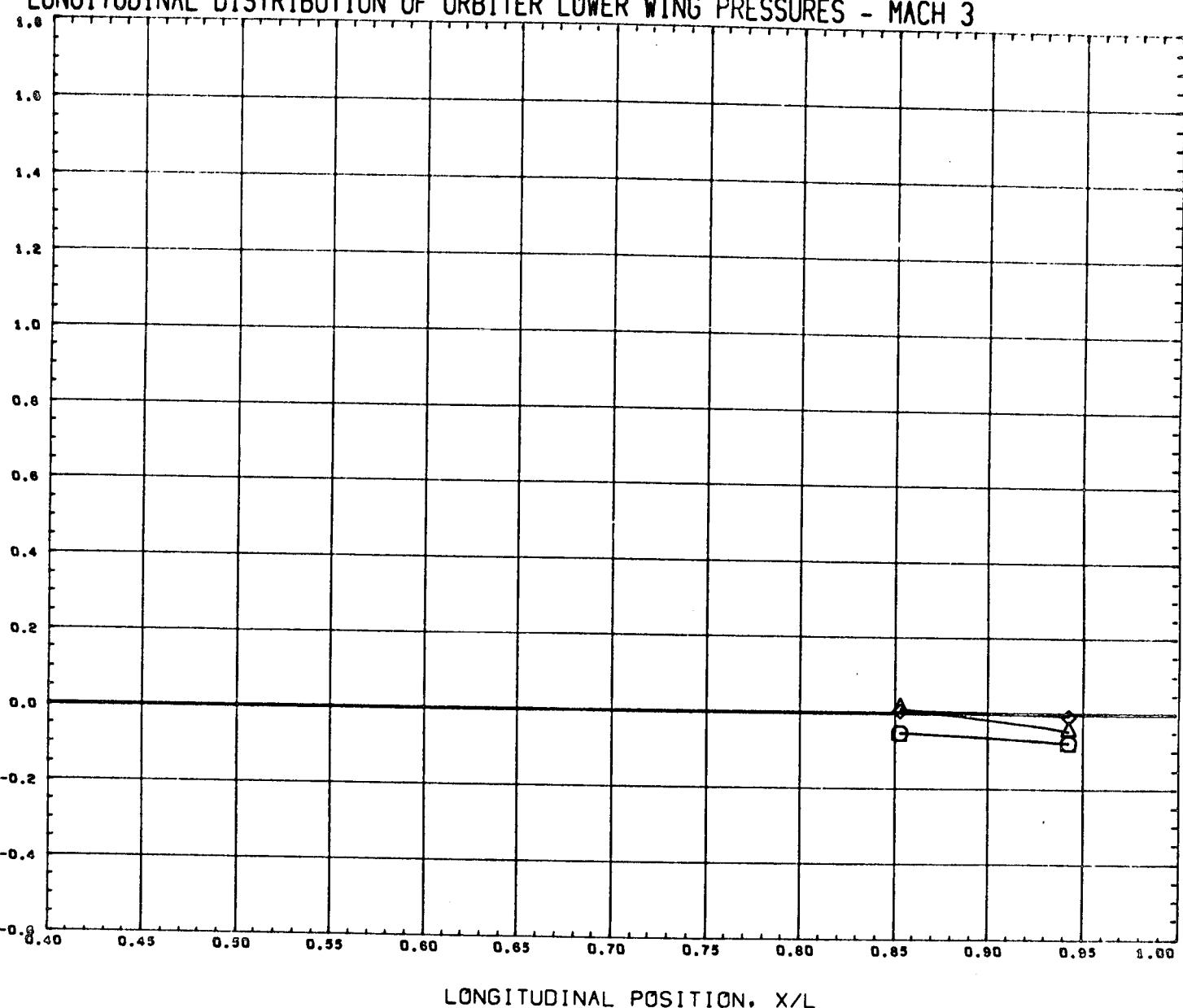
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8332•

PAGE 347

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ○ | 0.038 | 0.738 | 0.105 |
| △ | 0.101 | | |
| ◊ | 0.161 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|-------|
| ALPHAB | - 4.950 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

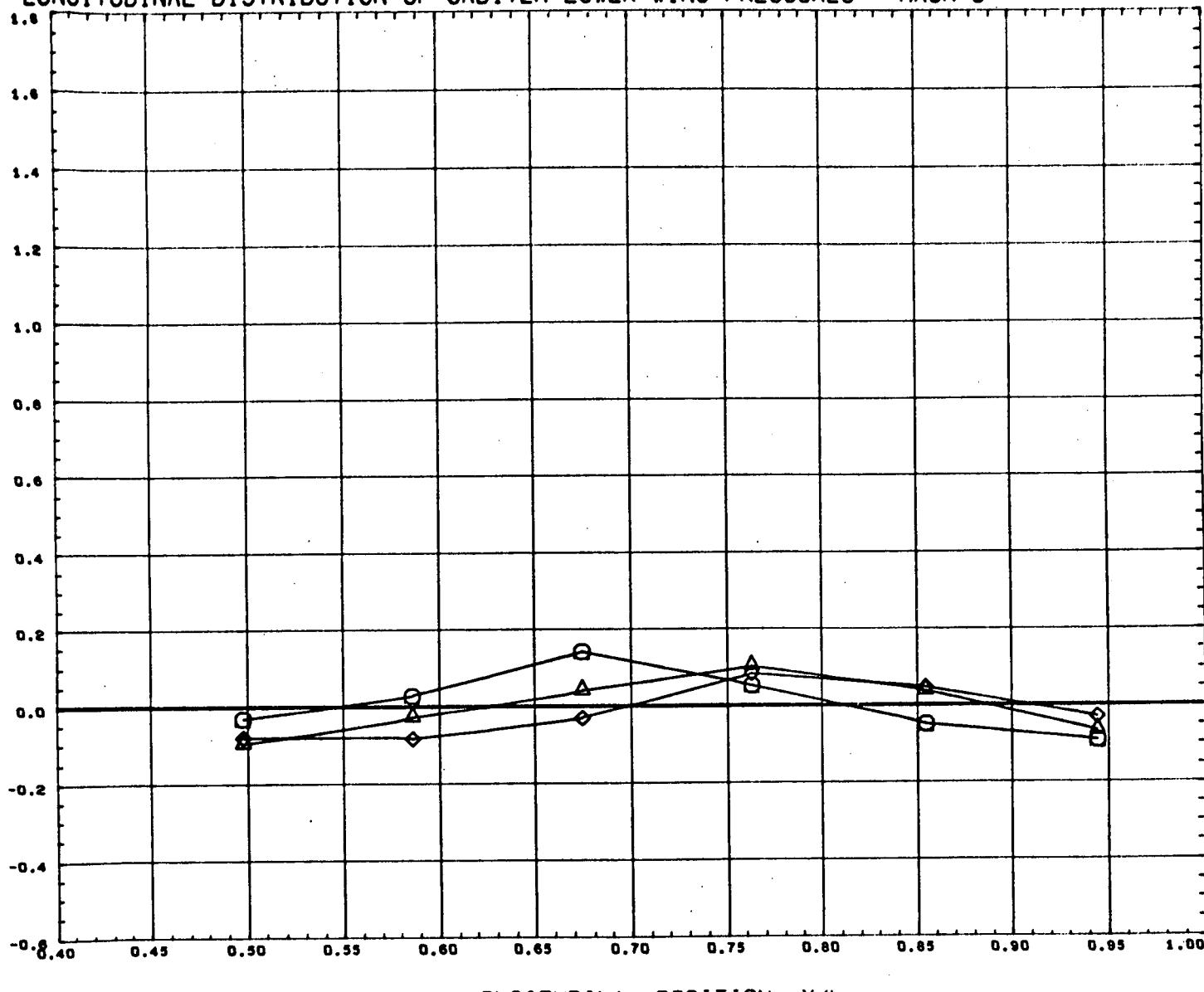
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8332•

PAGE 348

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| ○ | 0.040 | 0.230 | 0.105 |
| △ | 0.104 | | |
| ◊ | 0.167 | | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------|
| ALPHAB | 0.003 | MACH |
| ALPHAI | 0.000 | ORBPOW |
| BSTPOW | 0.000 | |

REFERENCE FILE

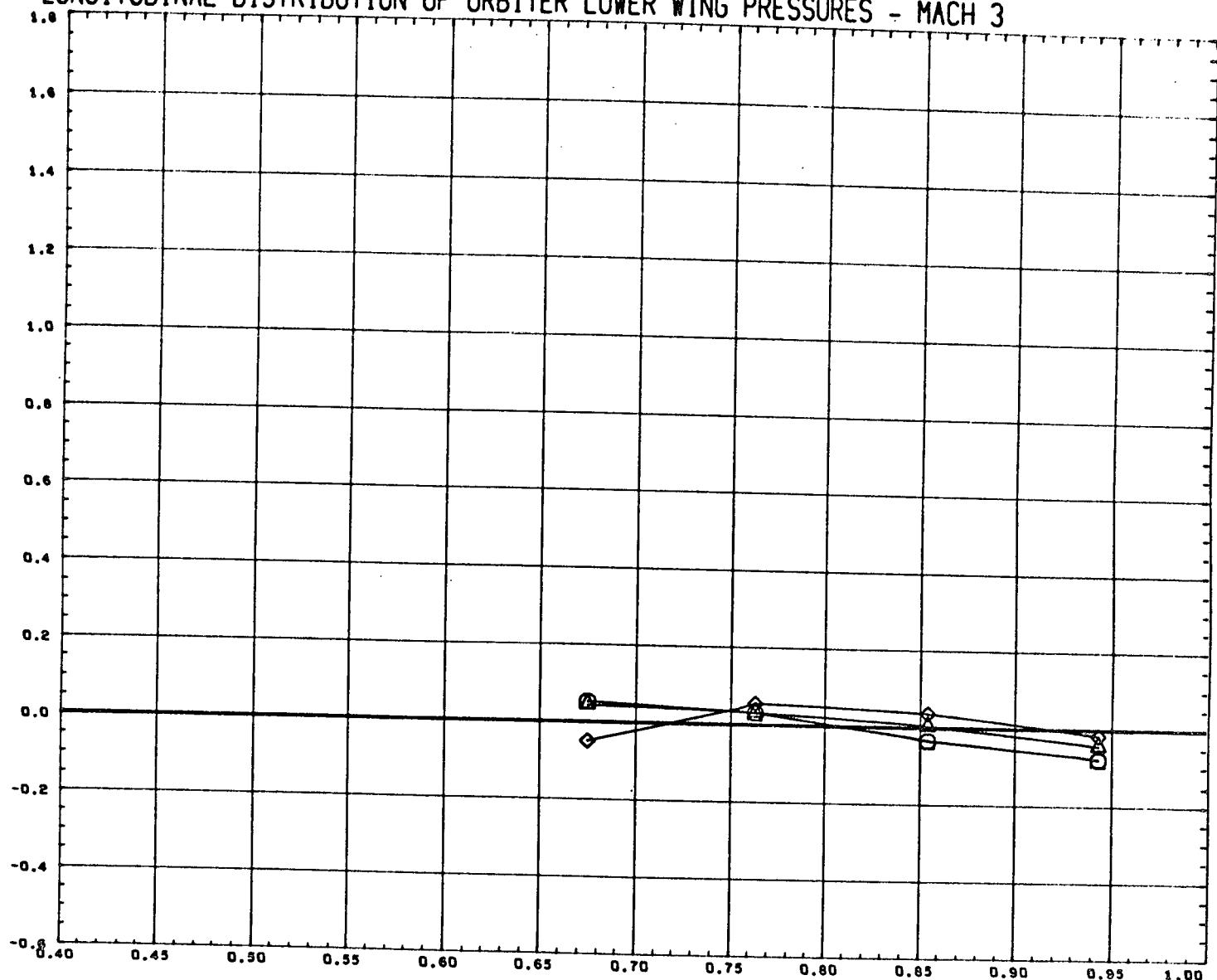
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8333•

PAGE 349

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

SYMBOL DELTAX Y/B DELTAZ

Δ 0.040 0.399 0.105

\diamond 0.104 0.167 0.167

PARAMETRIC VALUES

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|-------|
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

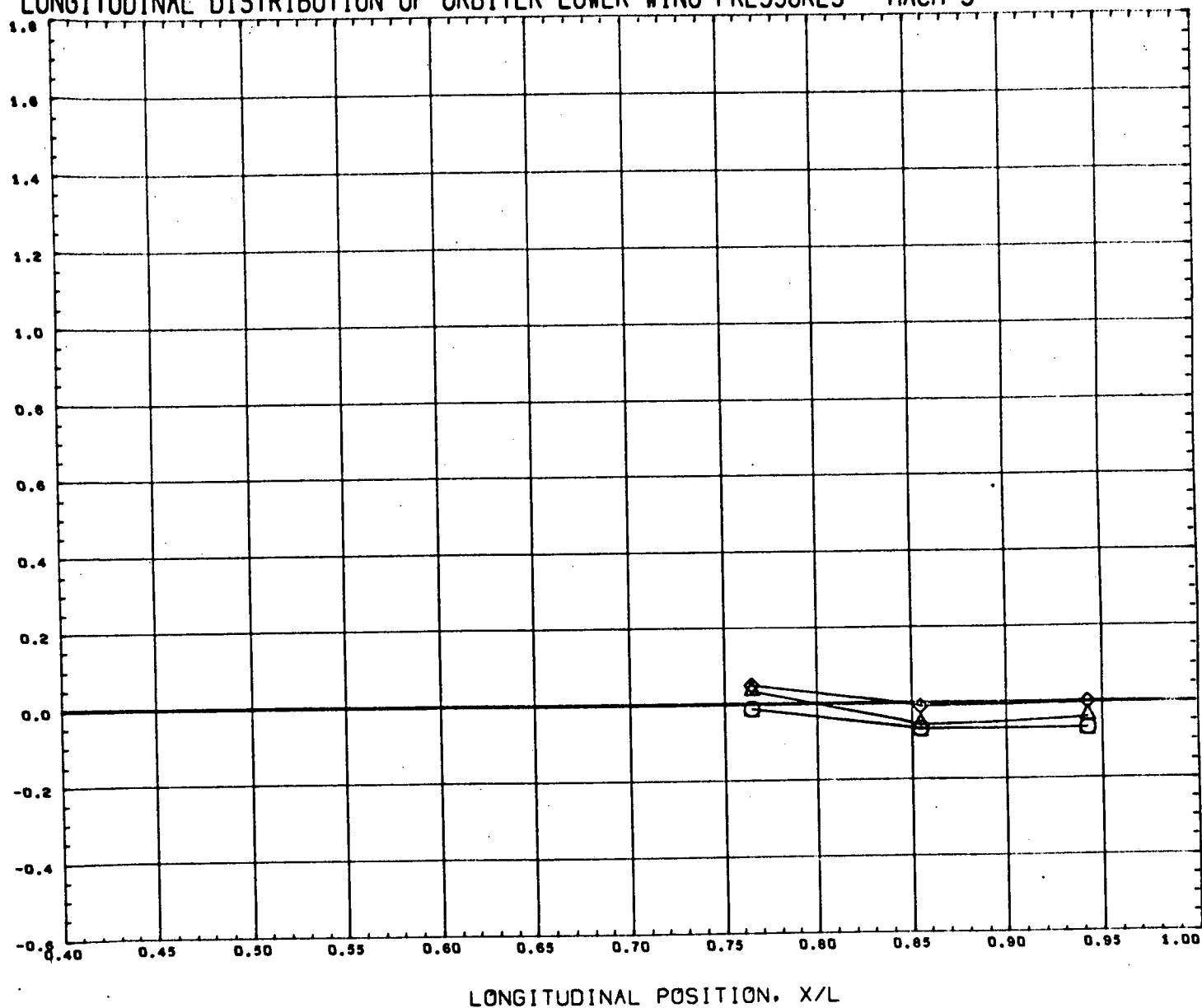
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8333•

PAGE 350

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



LONGITUDINAL POSITION. X/L

SYMBOL DELTAX Y/B DELTAZ

○ 0.040 0.568 0.105
△ 0.104 0.568 0.105
◊ 0.167 0.568 0.105

PARAMETRIC VALUES

| | | | |
|--------|-------|--------|-------|
| ALPHAB | 0.003 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

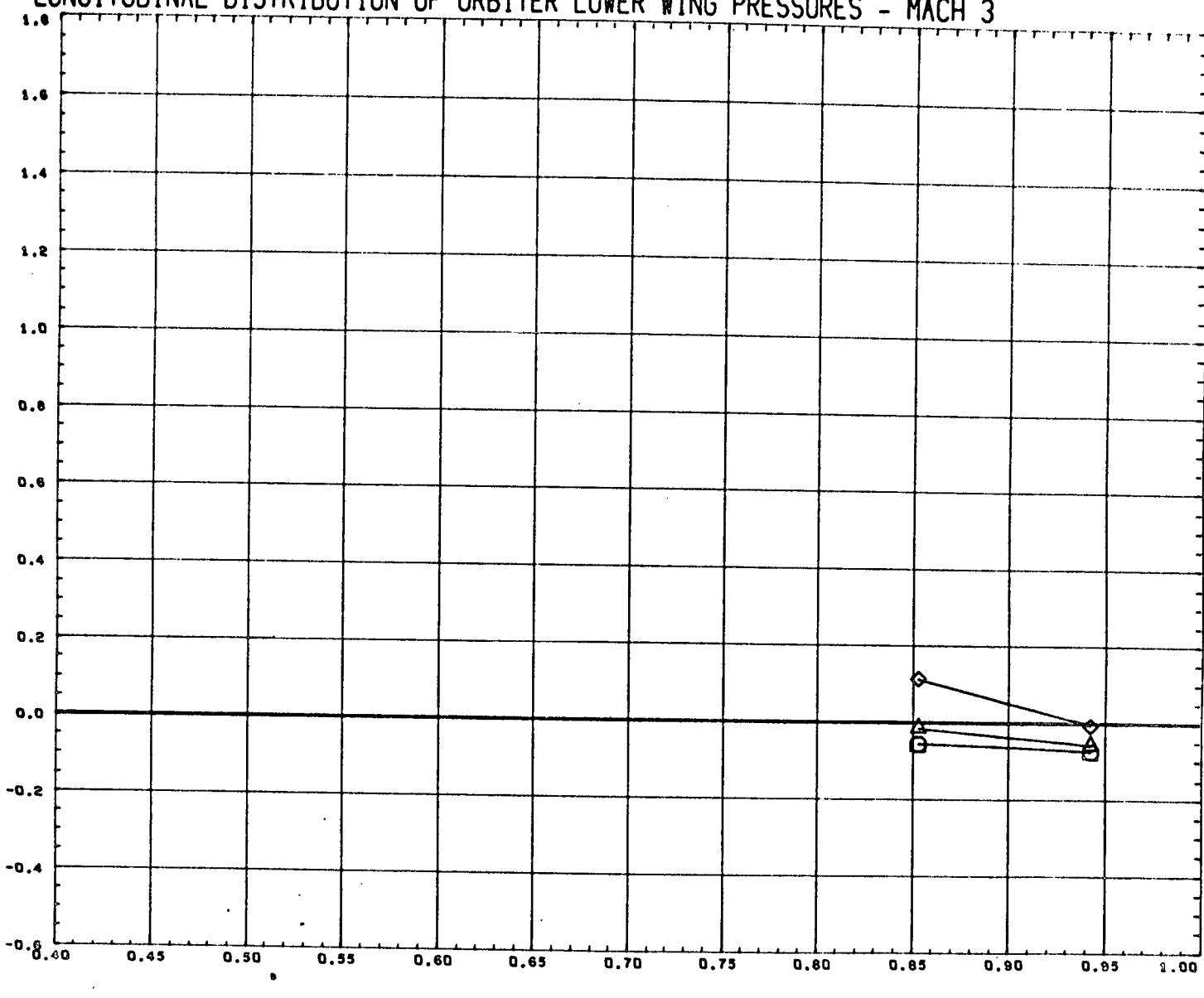
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8333•

PAGE 351

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ○ | 0.040 | 0.738 | 0.105 |
| △ | 0.104 | | |
| ◊ | 0.167 | | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------------|
| ALPHAB | 0.003 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

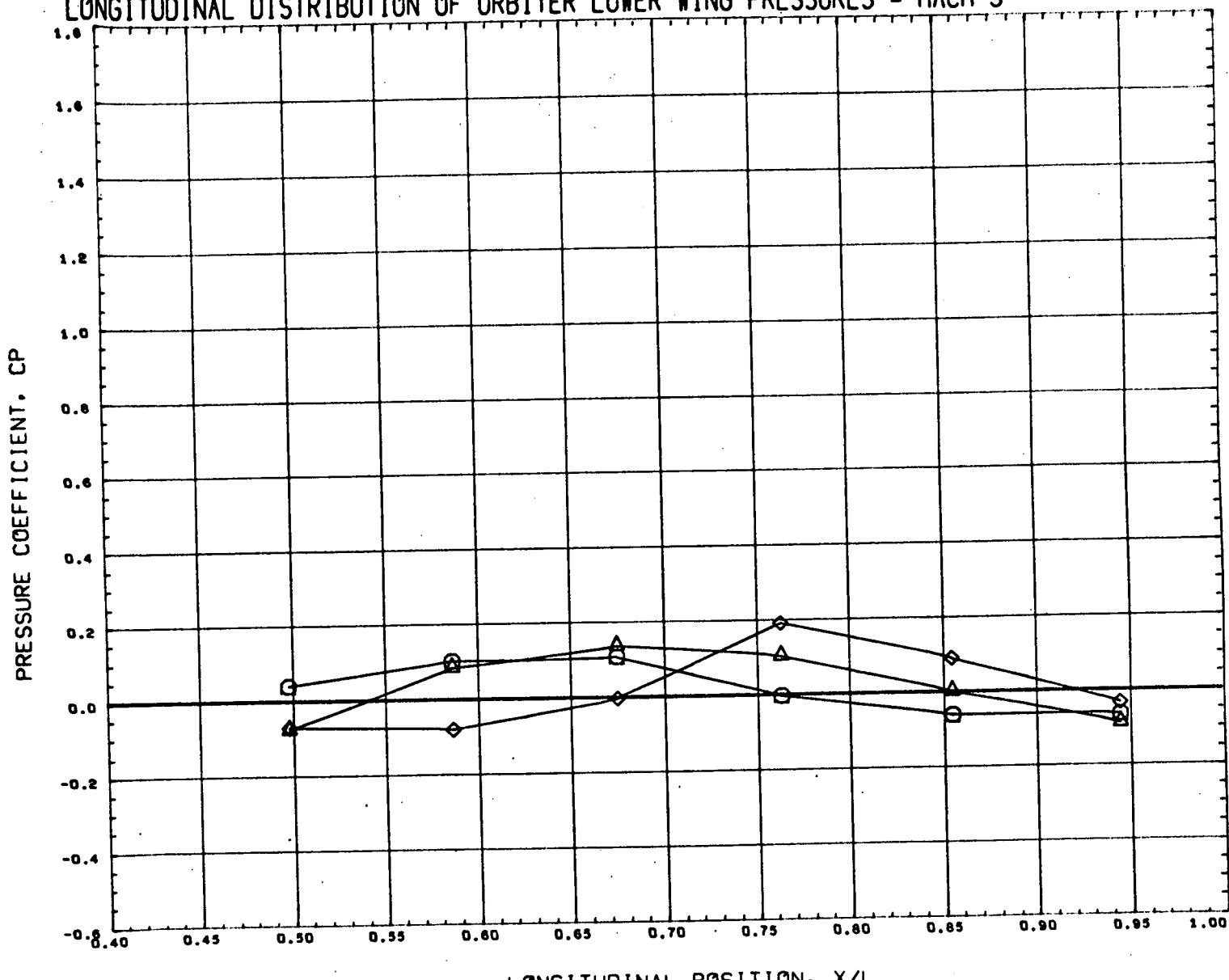
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8333•

PAGE 352

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|---|-------|-------|-------|
| ○ | 0.036 | 0.230 | 0.105 |
| △ | 0.099 | | |
| ◊ | 0.162 | | |

PARAMETRIC VALUES

| | | | |
|--------|-------|--------|-------|
| ALPHAB | 5.040 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | | | |

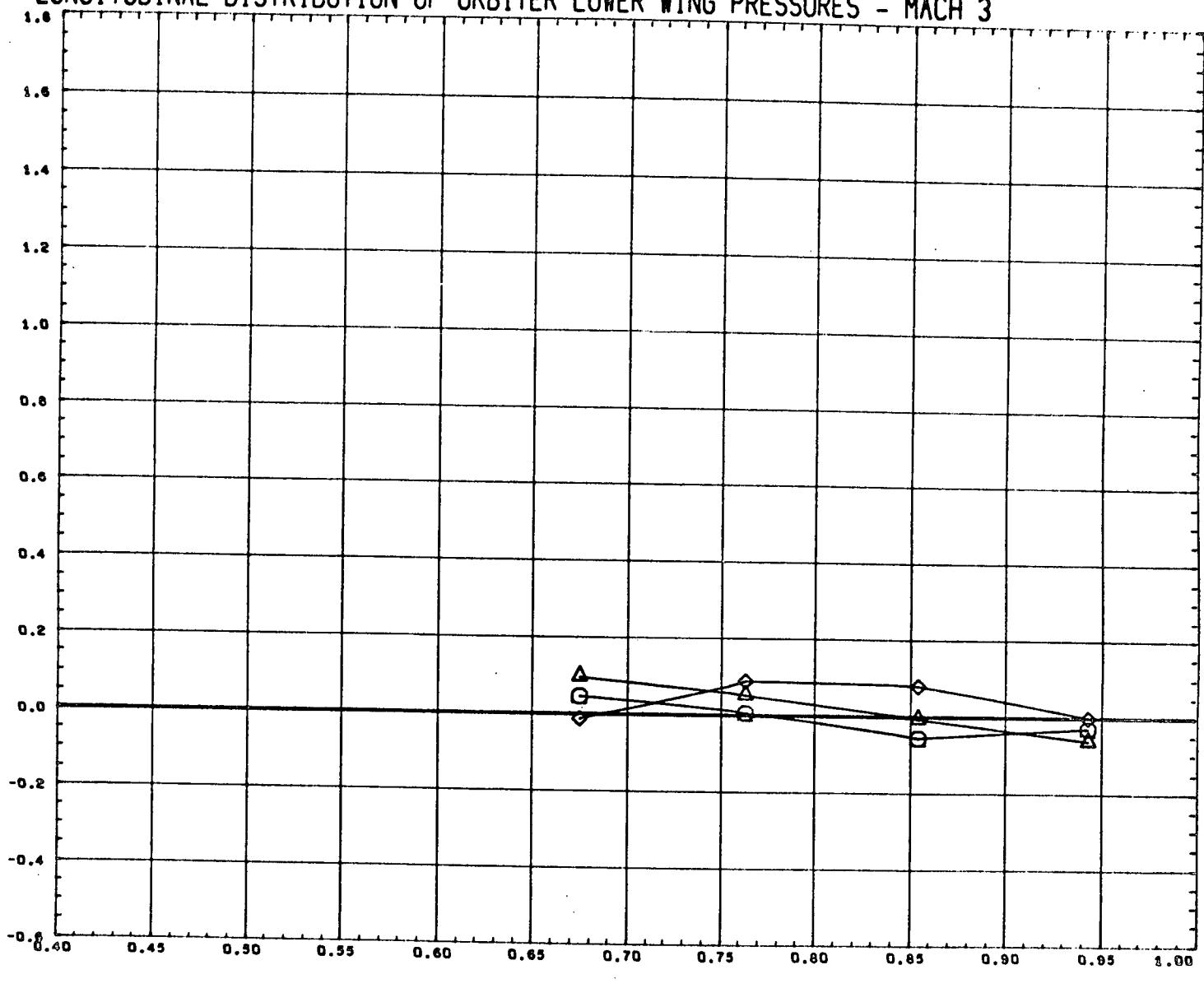
REFERENCE FILE
AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8334•

PAGE 353

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ○ | 0.036 | 0.399 | 0.105 |
| △ | 0.099 | | |
| ◇ | 0.162 | | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------|
| ALPHAB | 5.040 | MACH |
| ALPHAI | 0.000 | ORBPOW |
| BSTPOW | 0.000 | |

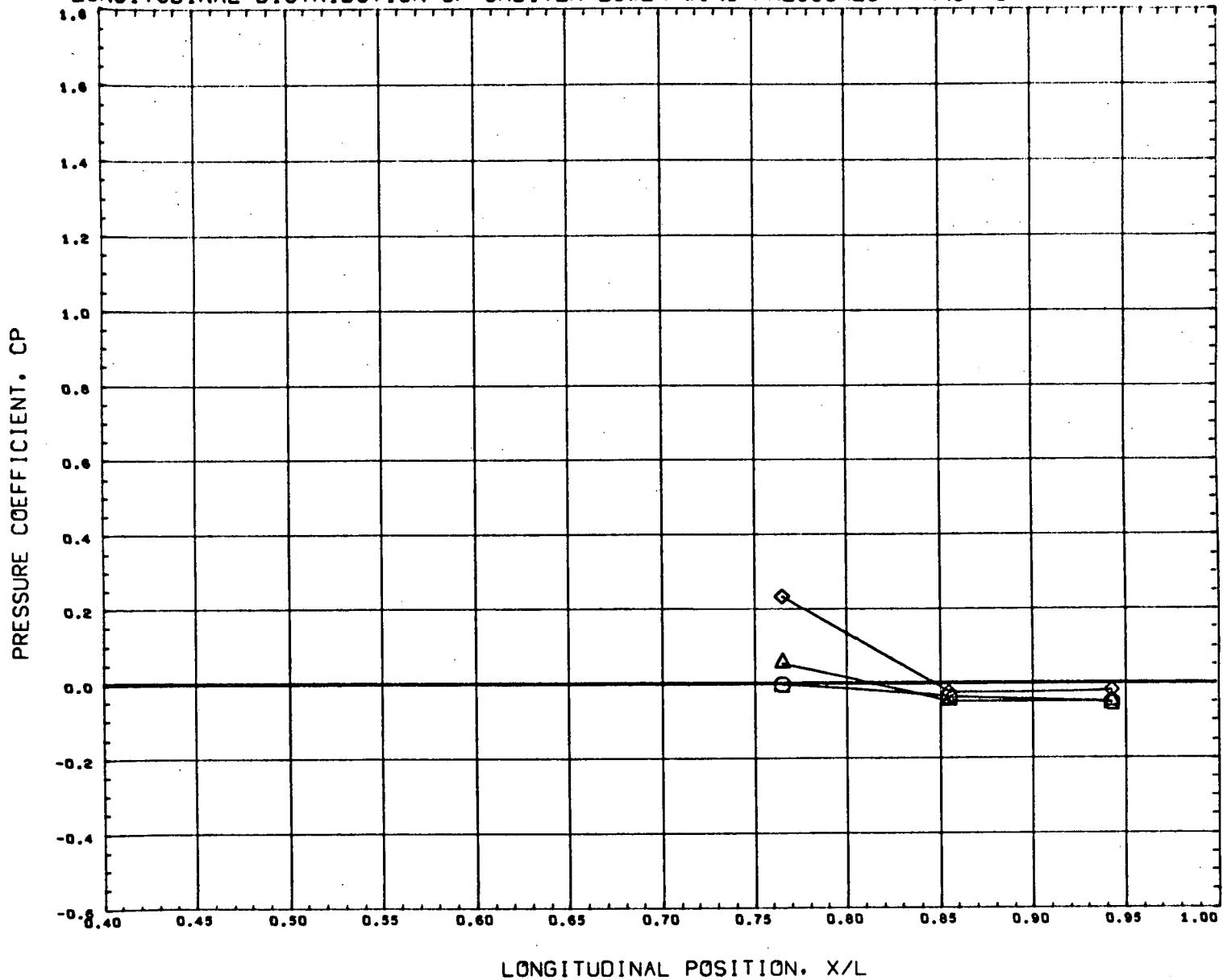
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AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8334•

PAGE 354

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



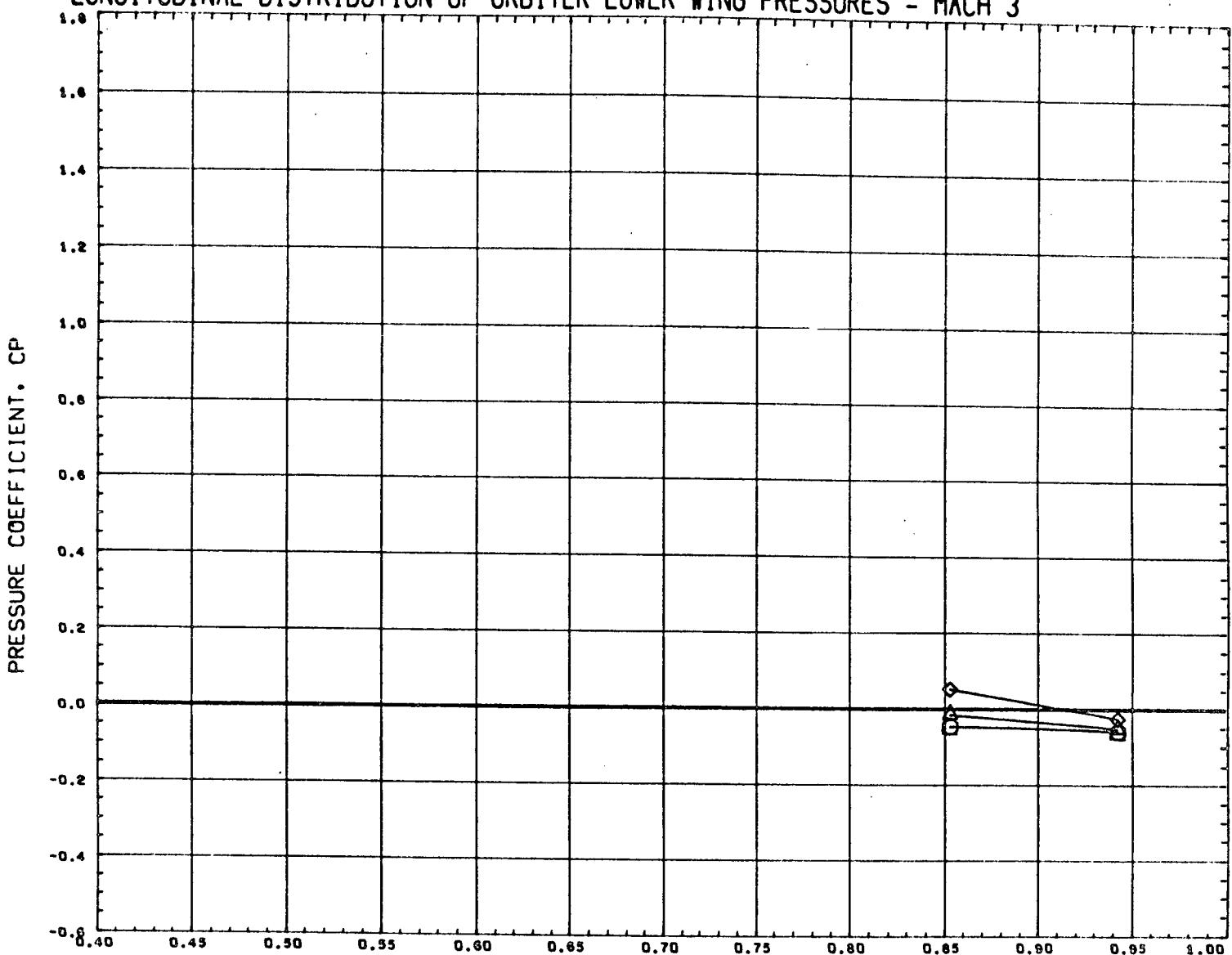
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8334•

PAGE 355

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTA X | Y/B | DELTA Z |
|--------|---------|-------|---------|
| △ | 0.038 | 0.738 | 0.105 |
| ○ | 0.099 | | |
| ◊ | 0.162 | | |

| PARAMETRIC VALUES | | |
|-------------------|-------|--------------|
| ALPHAB | 5.040 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

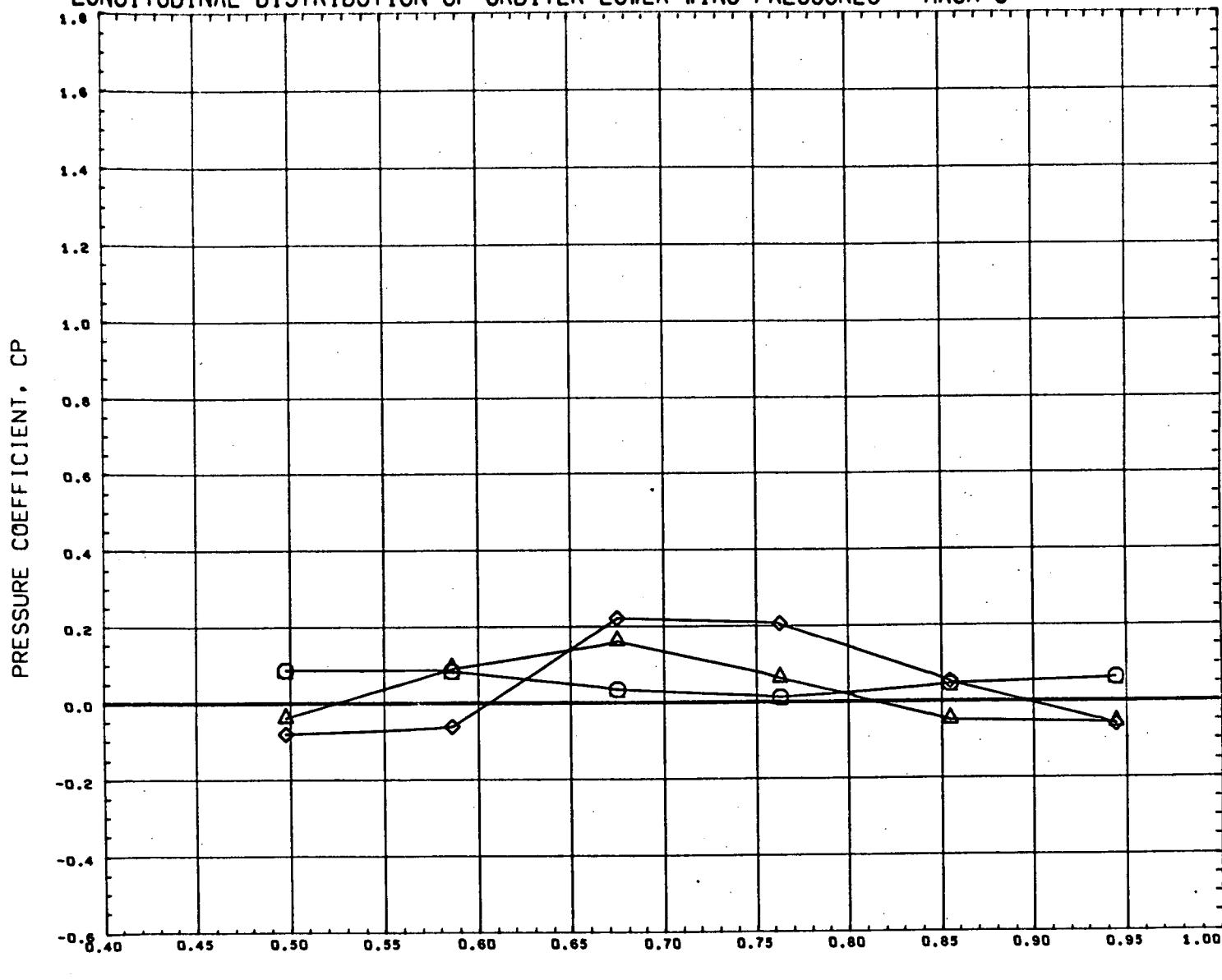
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8334•

PAGE 356

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



REFERENCE FILE

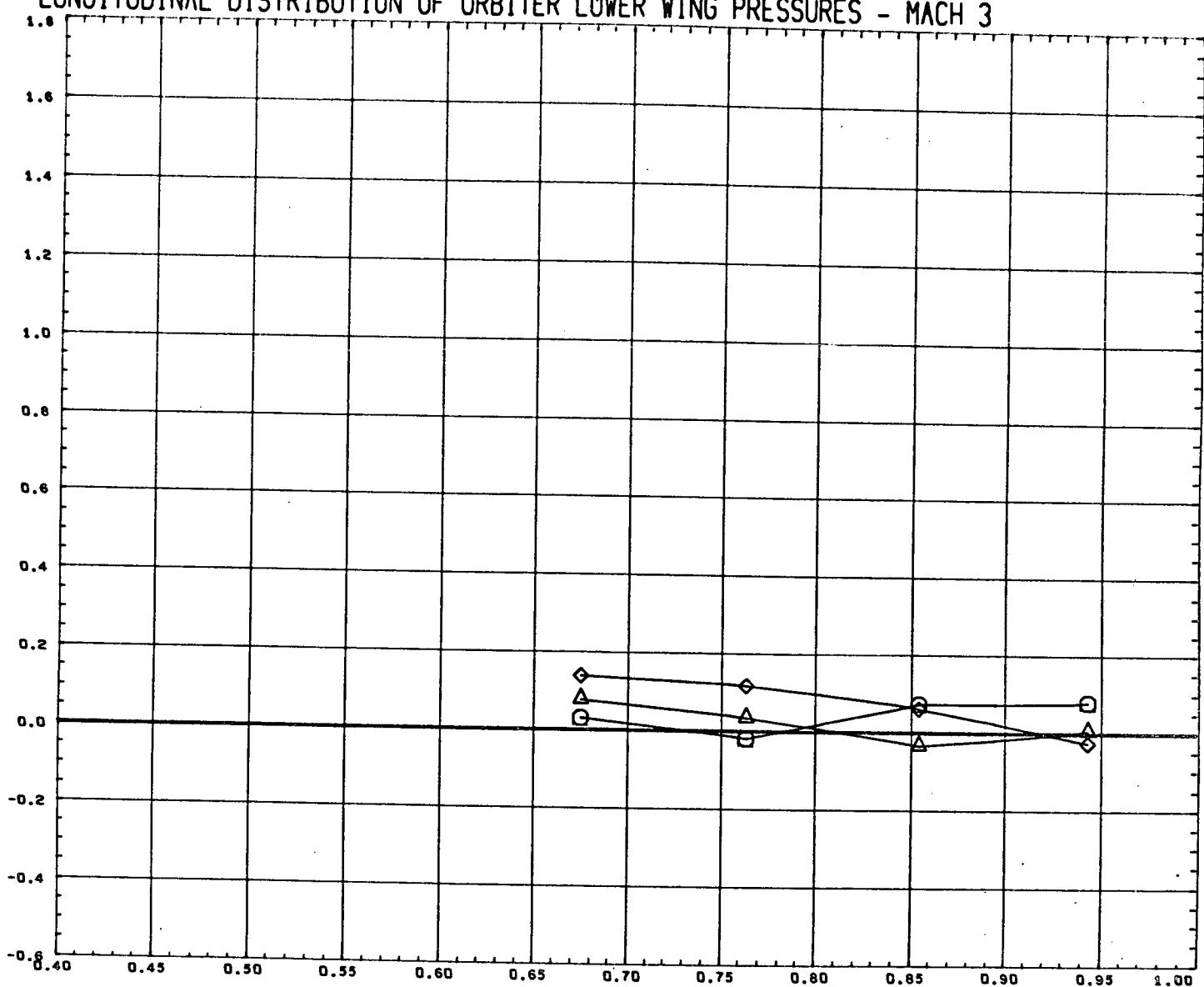
AEDC VAI163 MDAC ORBITER (LOWER WING)

•HT8335•

PAGE 357

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX Y/B DELTAZ

| | | | |
|-------------|-------|-------|-------|
| \diamond | 0.042 | 0.399 | 0.105 |
| \square | 0.104 | | |
| \triangle | 0.165 | | |

LONGITUDINAL POSITION. X/L

| PARAMETRIC VALUES | | |
|-------------------|--------|-----------------|
| ALPHAB | 10.000 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

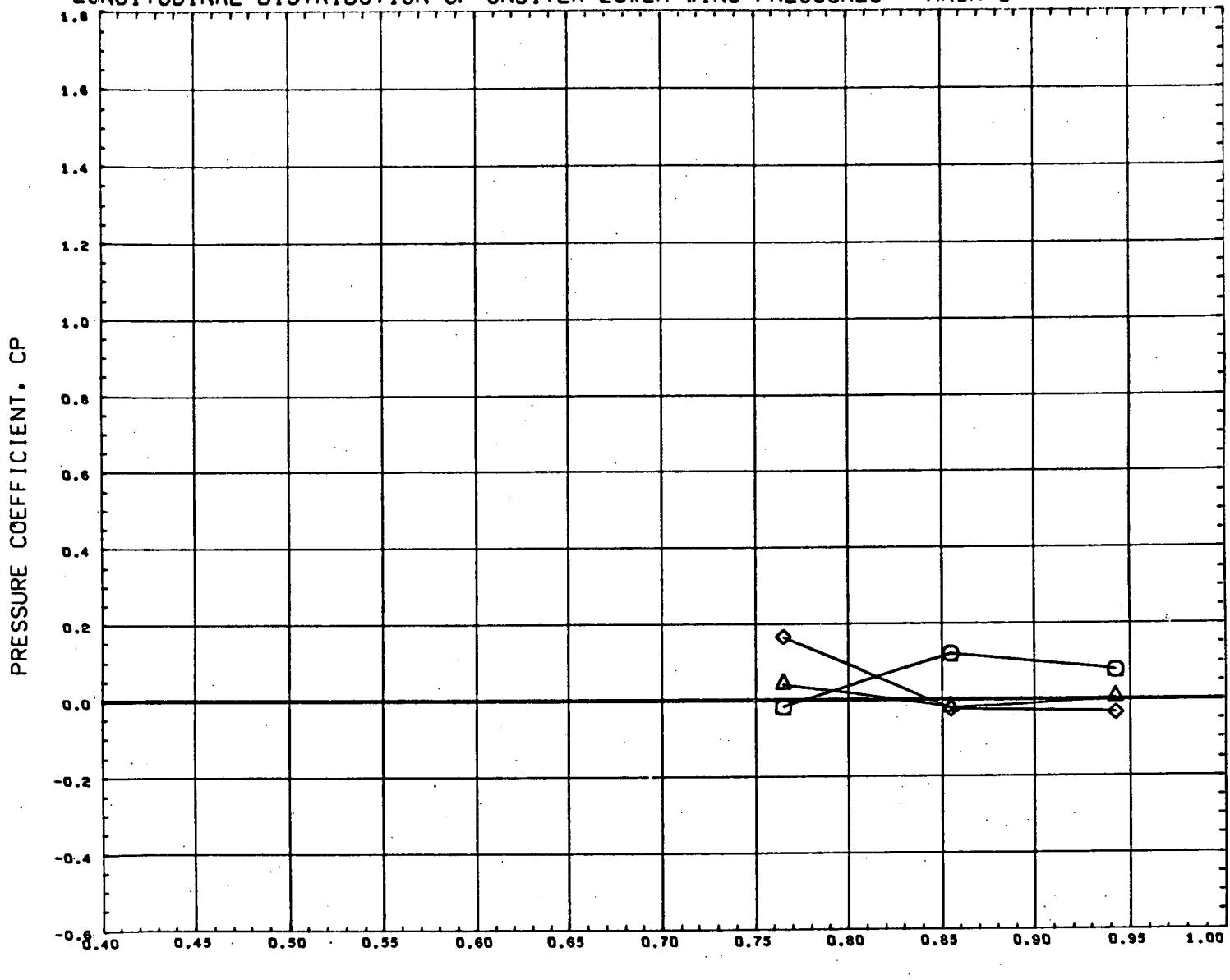
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8335•

PAGE 358

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



LONGITUDINAL POSITION, X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ○ | 0.042 | 0.568 | 0.105 |
| △ | 0.104 | | |
| ◊ | 0.165 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|--------|
| ALPHAB | 10.000 | MACH |
| ALPHAI | 0.000 | ORBPOW |
| BSTPOW | 0.000 | |

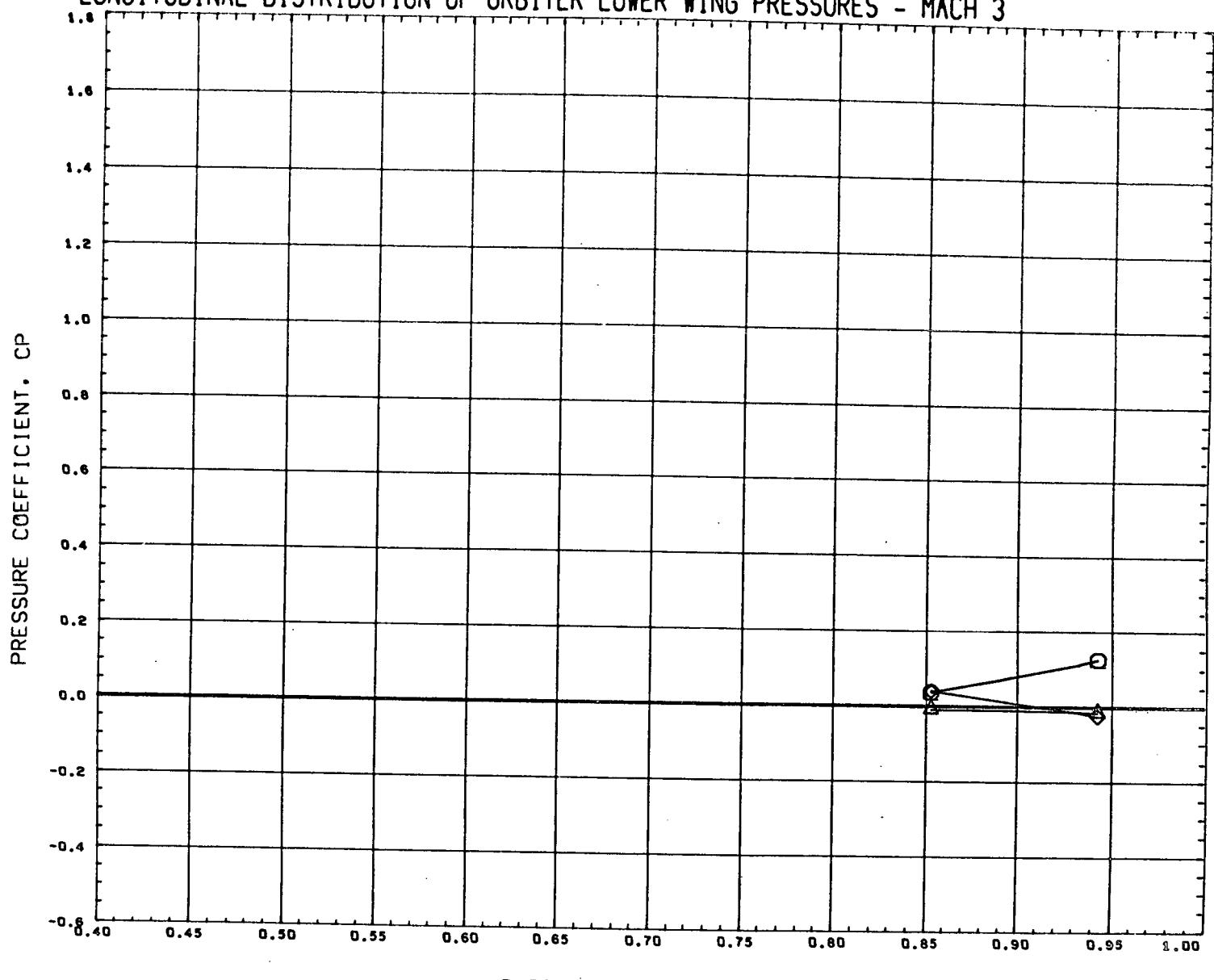
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8335•

PAGE 359

LONGITUDINAL DISTRIBUTION OF ORBITER LOWER WING PRESSURES - MACH 3



LONGITUDINAL POSITION. X/L

| SYMBOL | DELTAX | Y/B | DELTAZ |
|--------|--------|-------|--------|
| ○ | 0.042 | 0.738 | 0.105 |
| △ | 0.104 | | |
| ◊ | 0.165 | | |

| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|-------|
| ALPHAB | 10.000 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

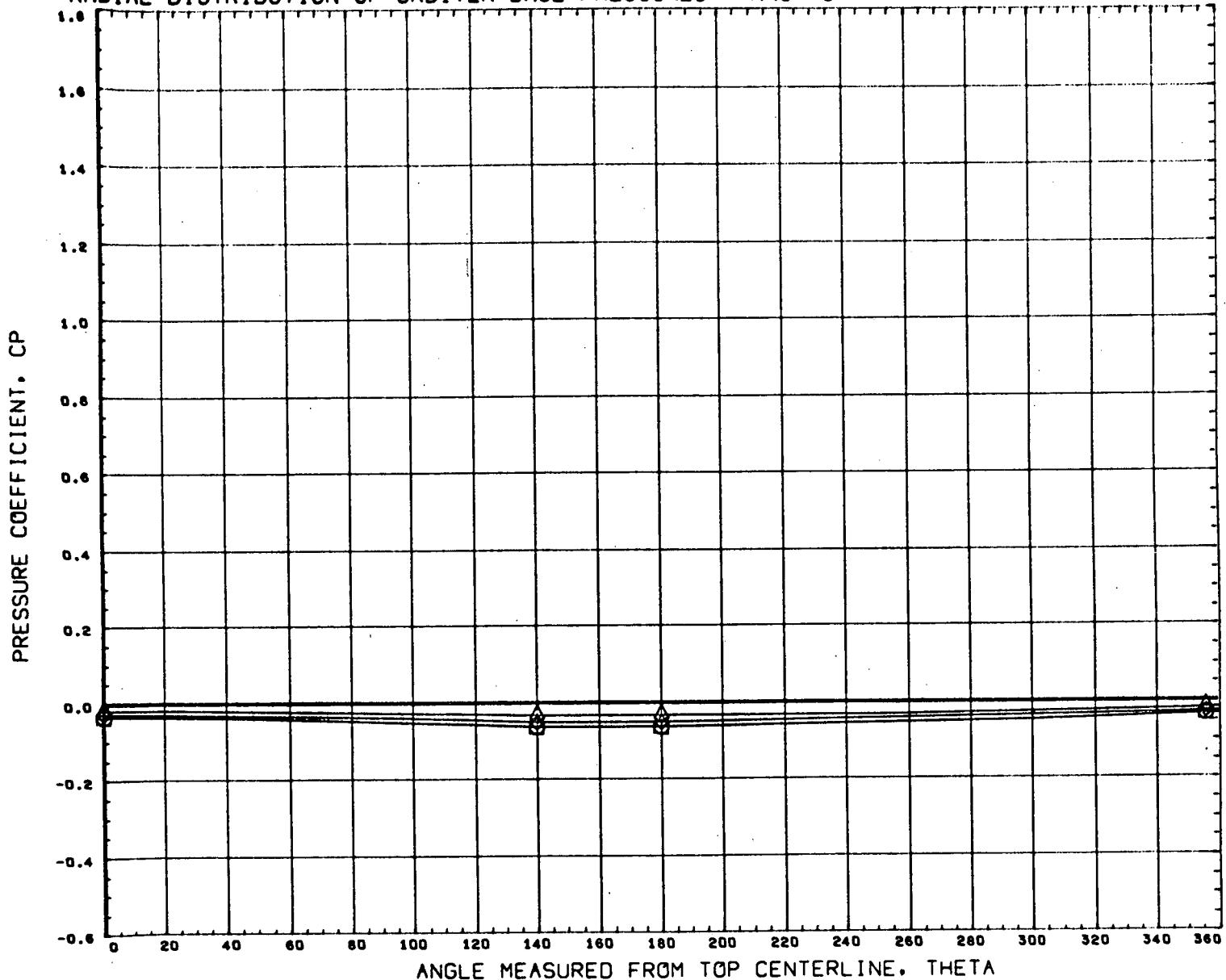
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (LOWER WING)

•HT8335•

PAGE 360

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



| SYMBOL | DELTAX | X/L | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 1.000 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 9.979 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

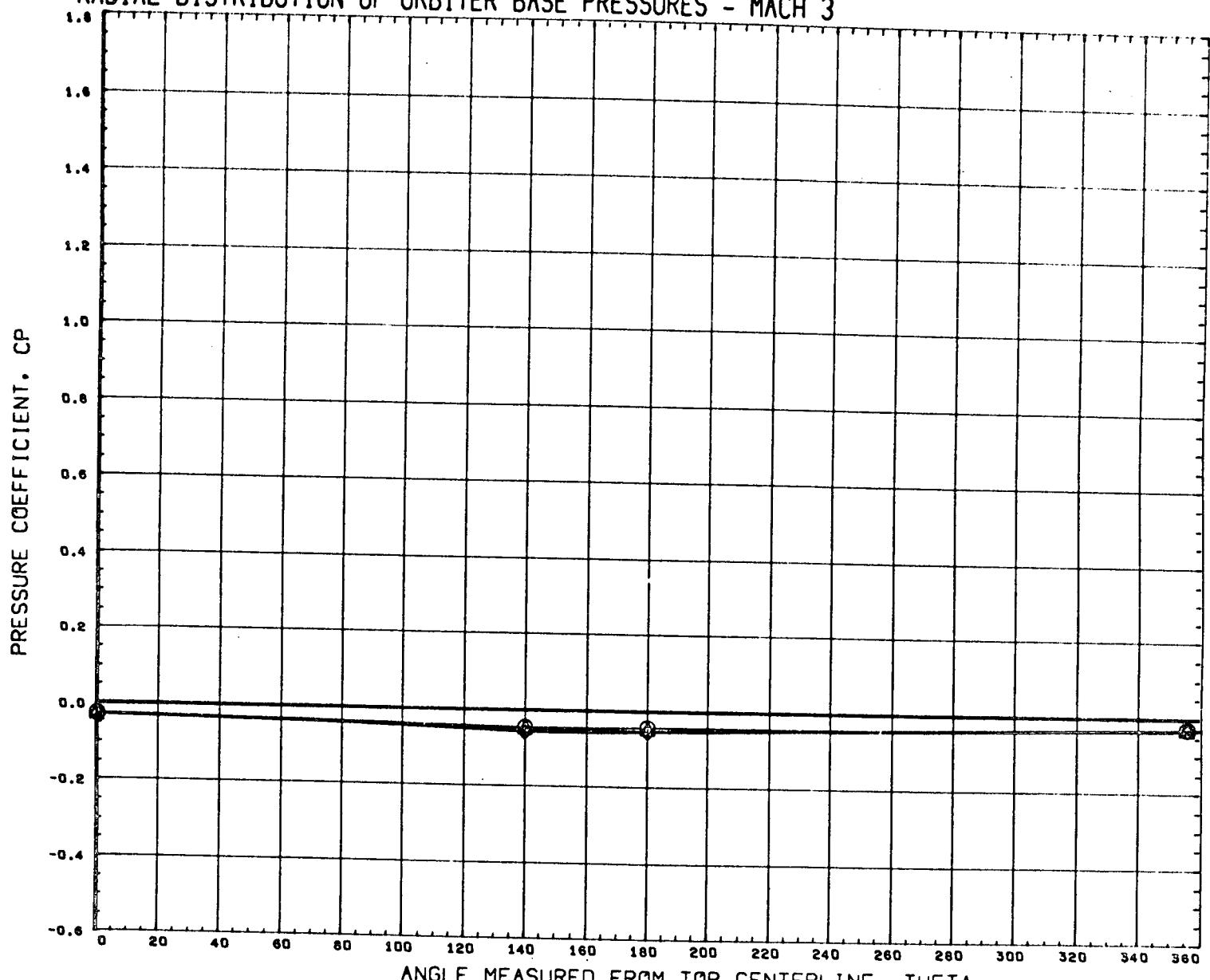
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8311 •

PAGE 361

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



SYMBOL DELTAX X/L DELTAZ

- - 0.143 1.000 0.151
- △ 0.104
- ◊ 0.226

PARAMETRIC VALUES

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|---------|
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

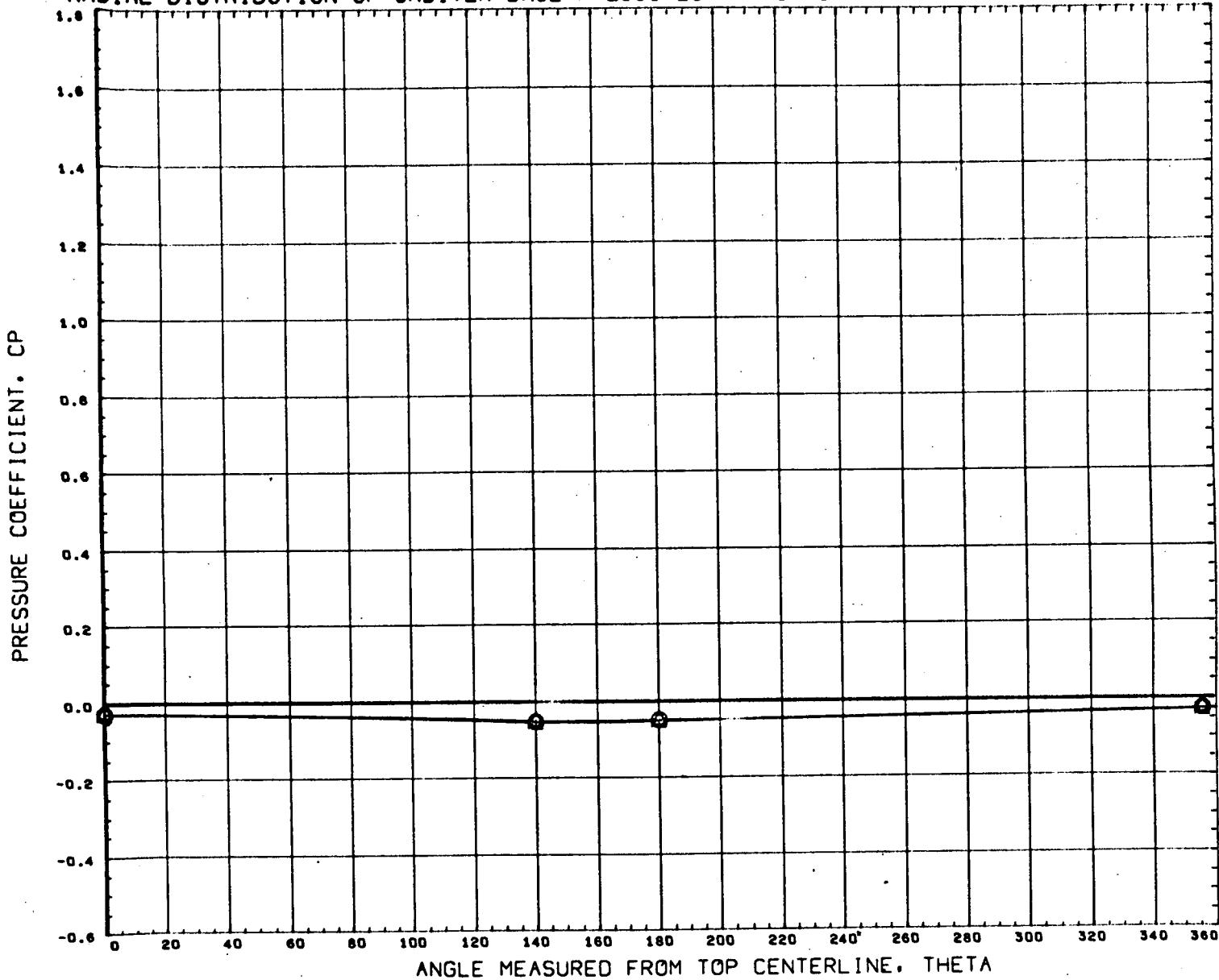
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8311 •

PAGE 362

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



| SYMBOL | DELTA X | X/L | DELTA Z |
|--------|---------|-------|---------|
| ○ | - 0.143 | 1.000 | 0.228 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 9.979 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

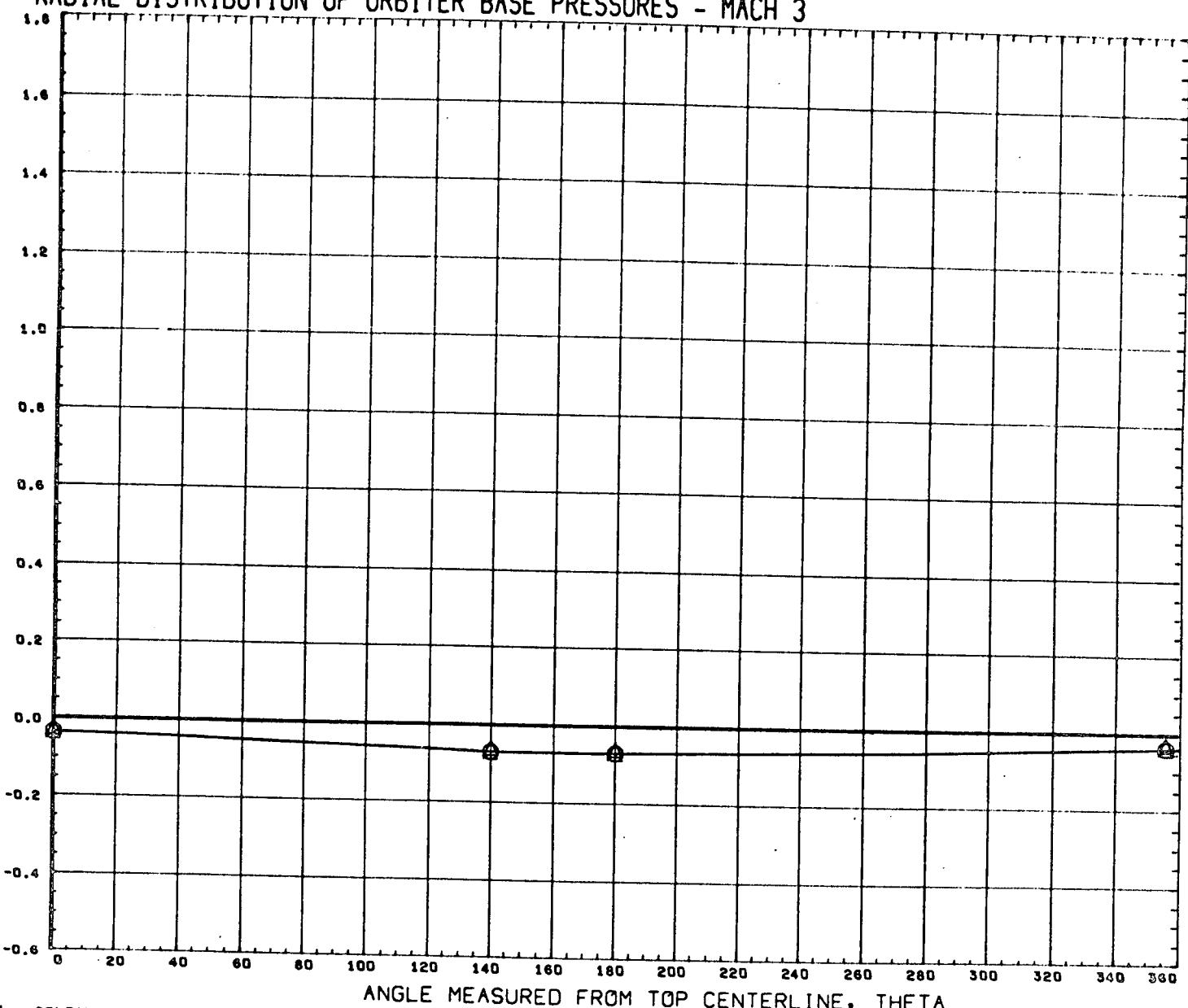
AEDC VA1163 MDAC ORBITER (BASE)

• IT8311 •

PAGE 363

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX X/L DELTAZ
 ○ - 0.390 1.000 0.908
 △ 0.460

ANGLE MEASURED FROM TOP CENTERLINE, THETA

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 9.979 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

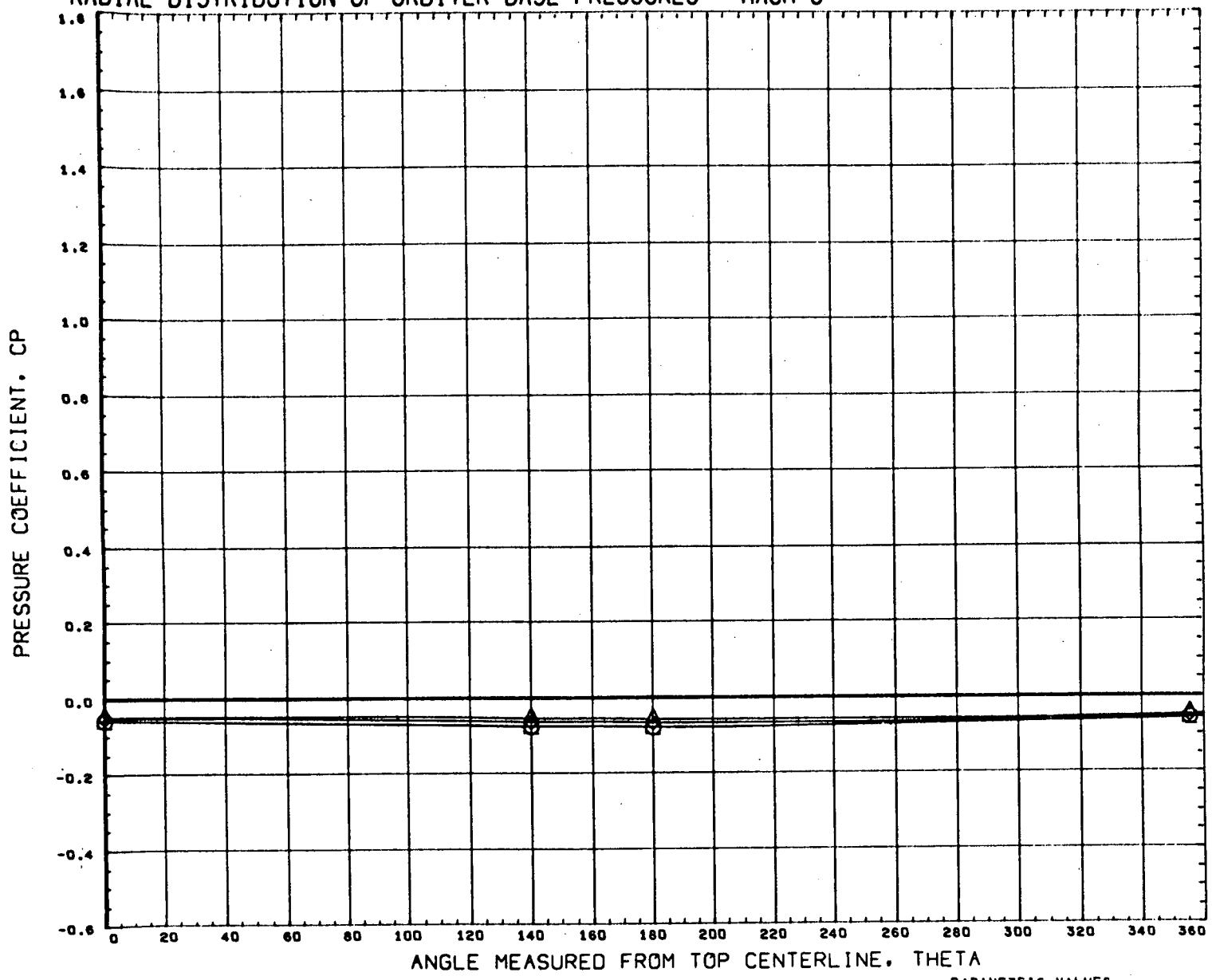
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8311 •

PAGE 364

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



| SYMBOL | DELTAX | X/L | DELTAZ |
|-------------|---------|-------|--------|
| \circ | - 0.143 | 1.000 | 0.120 |
| \triangle | 0.103 | | |
| \diamond | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|----------------|
| ALPHAB | - 4.945 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

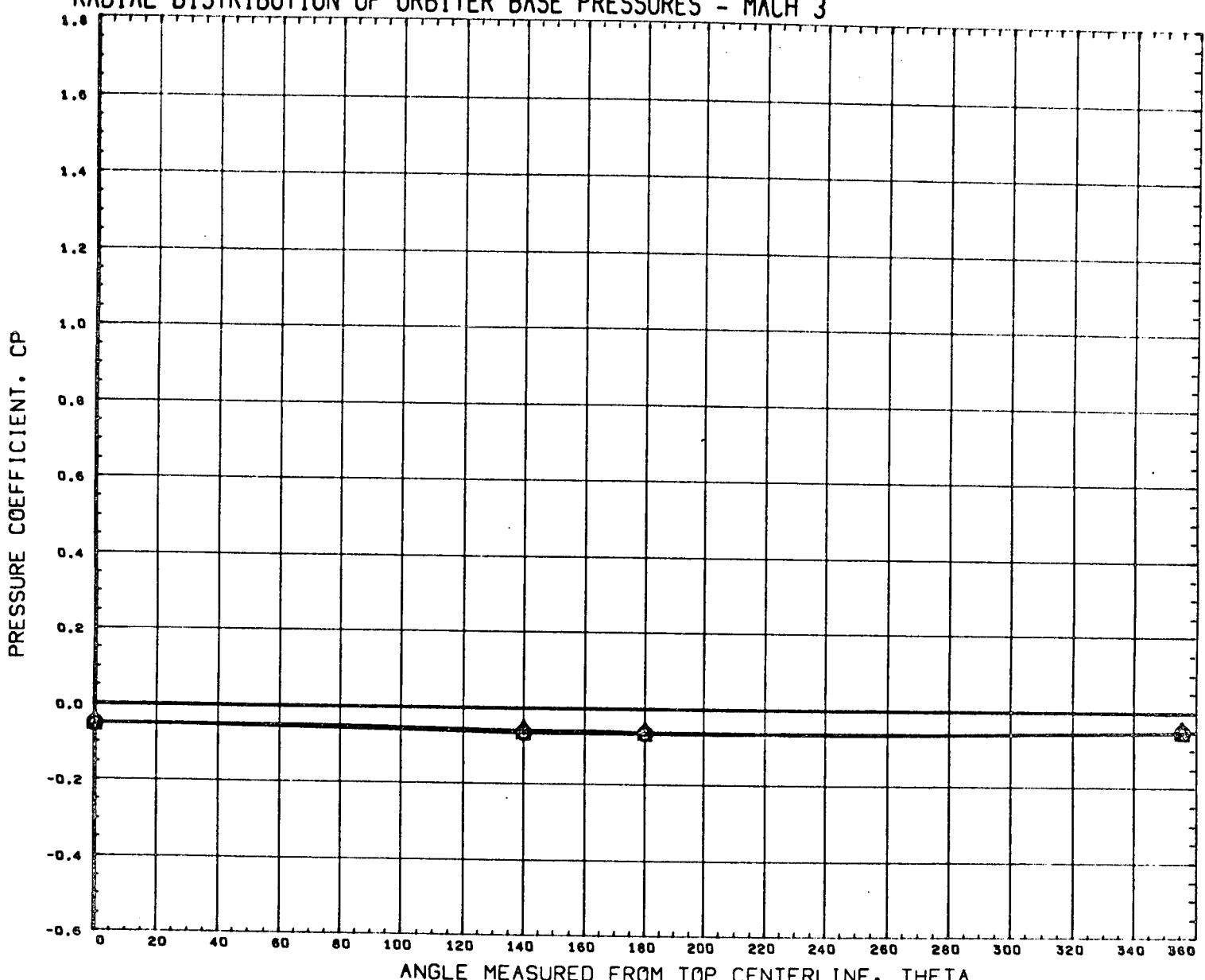
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8312 •

PAGE 365

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



SYMBOL DELTAX X/L DELTAZ

- - 0.143 1.000 0.151
- △ 0.103
- ◊ 0.227

PARAMETRIC VALUES

| | ALPHAB | MACH | ORBPOW |
|--------|--------|-------|---------|
| ALPHAI | 4.945 | 3.000 | 100.000 |
| BSTPOW | 0.000 | | |
| | 50.000 | | |

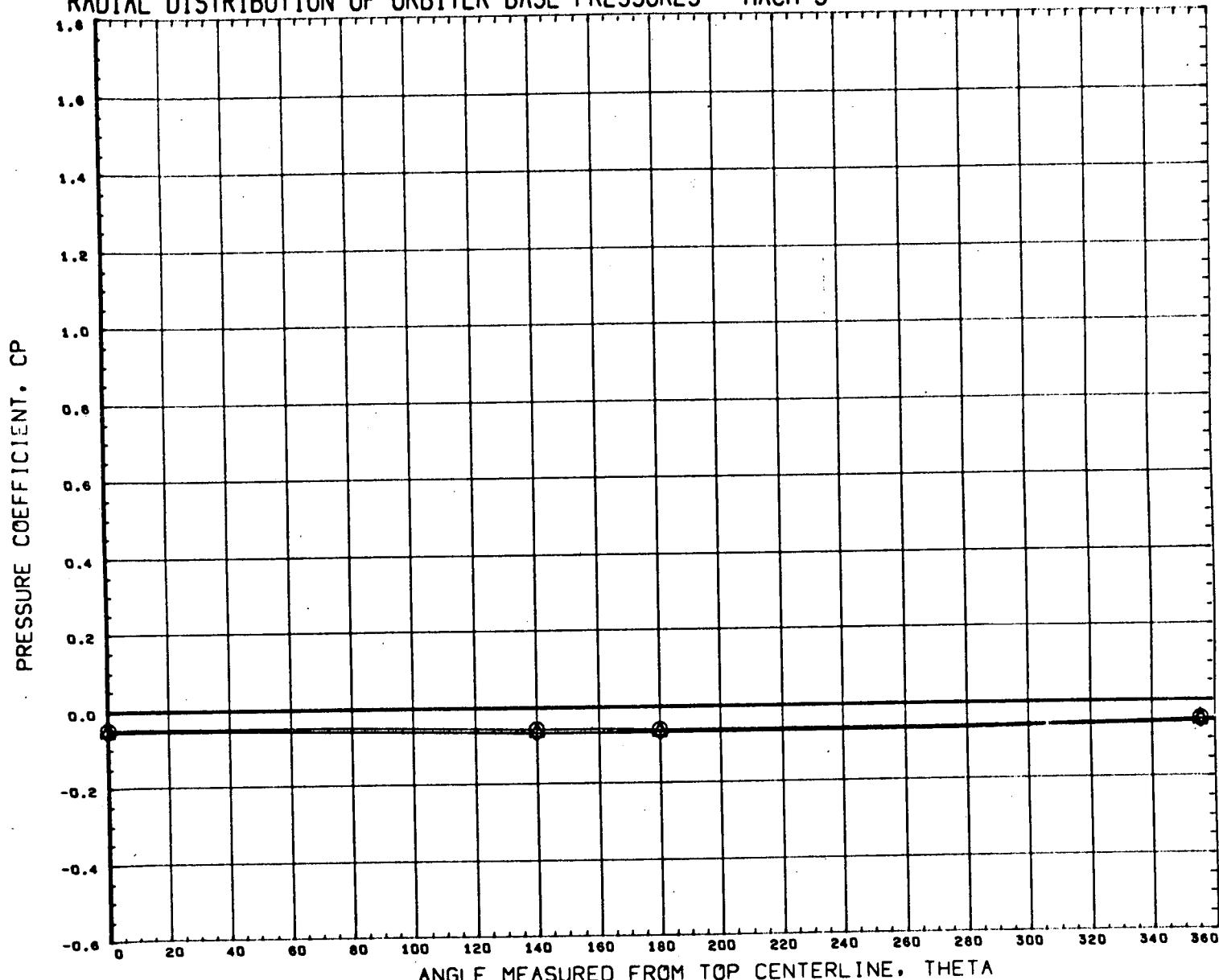
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8312 •

PAGE 366

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



| SYMBOL | DELTAX | X/L | DETAZ |
|------------|---------|-------|-------|
| Δ | - 0.143 | 1.000 | 0.228 |
| Δ | 0.103 | | |
| \diamond | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|---------|
| ALPHAB | - 4.945 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

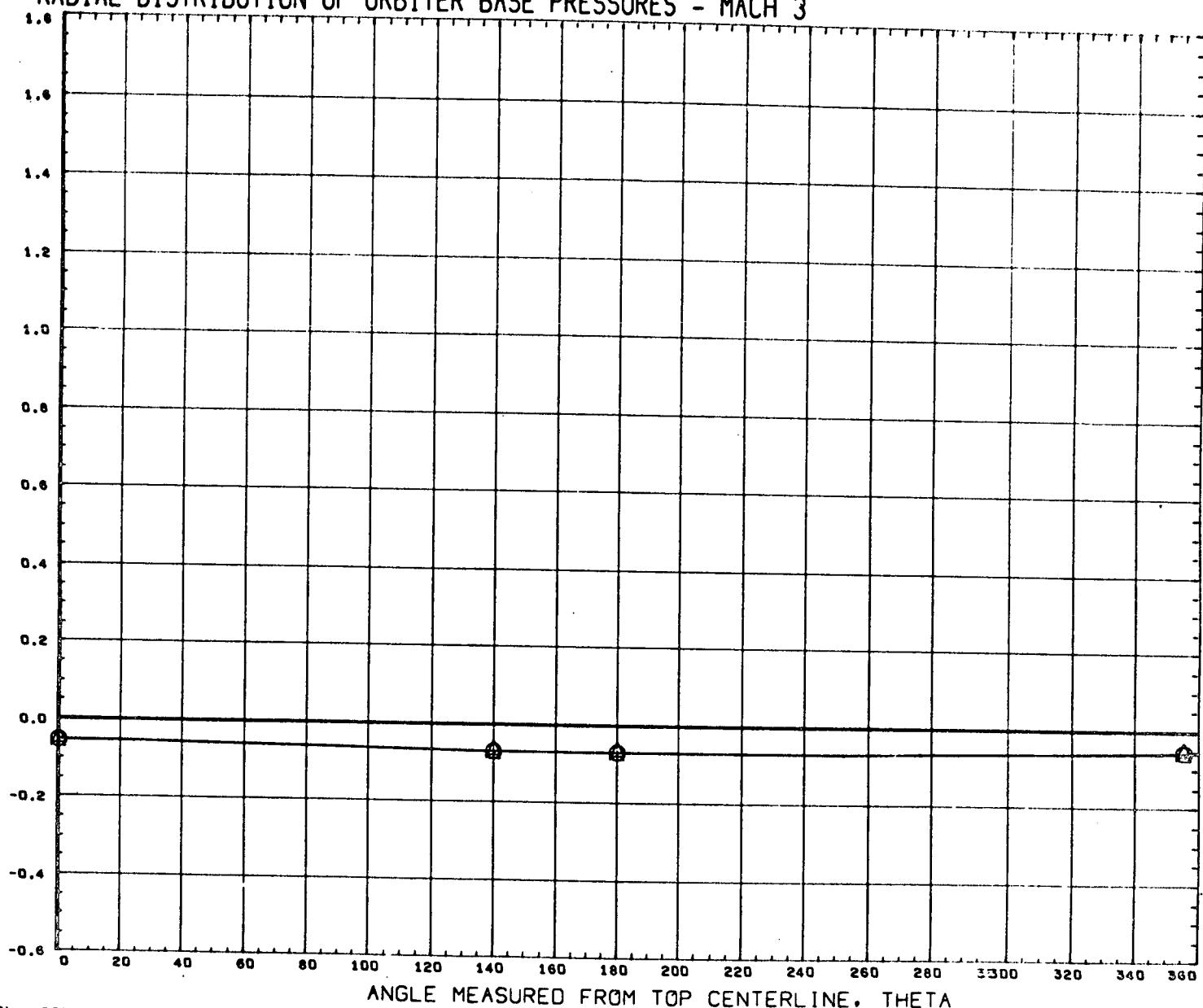
AEDC VA1163 MDAC ORBITER (BASE)

• IT8312 •

PAGE 367

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX X/L DELTAZ
○ - 0.390 1.000 0.908
△ 0.476

PARAMETRIC VALUES
 ALPHAB = 4.945 MACH = 3.000
 ALPHA1 = 0.000 ORBPOW = 100.000
 BSTPOW = 50.000

REFERENCE FILE

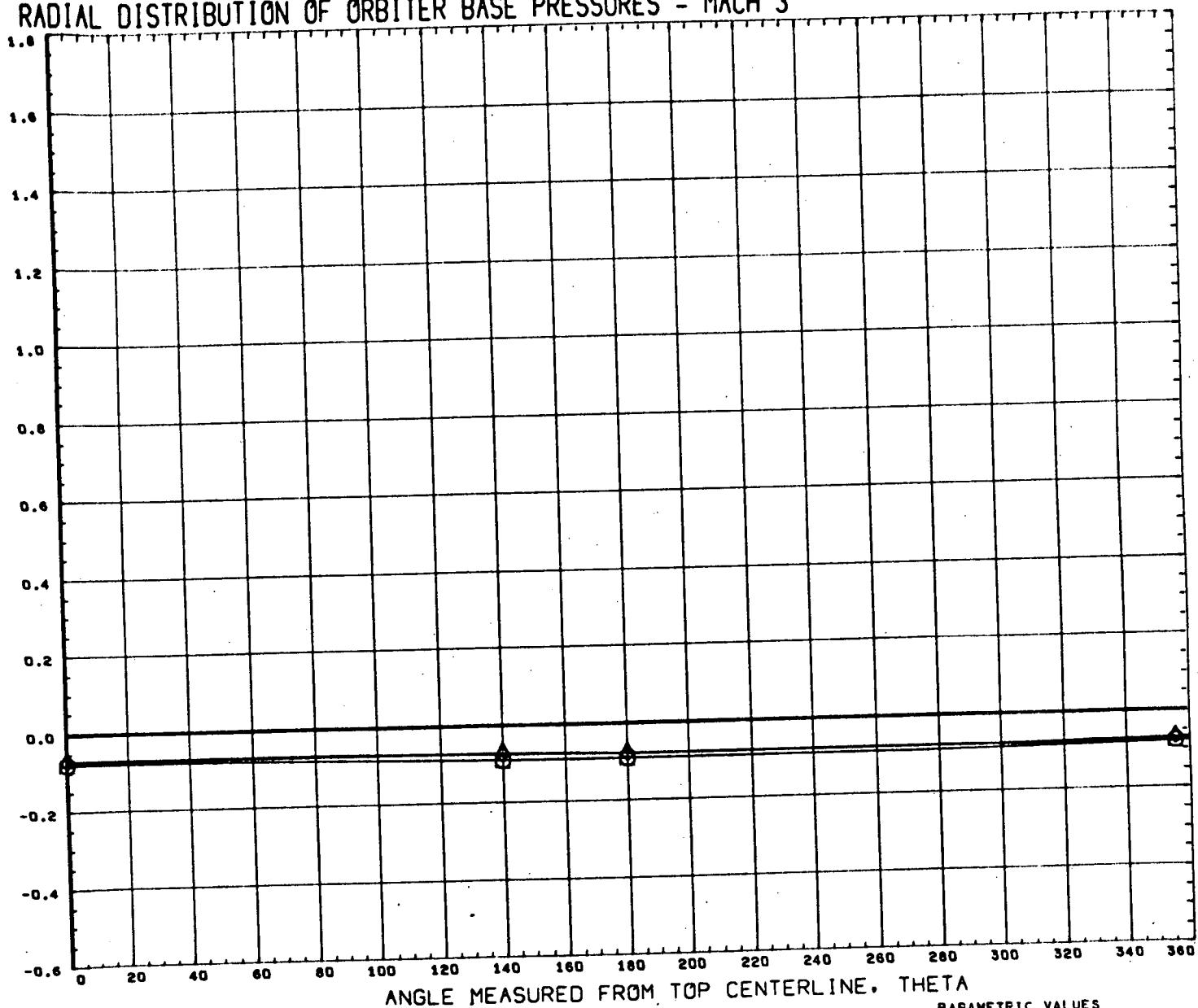
AEDC VA1163 MDAC ORBITER (BASE)

• IT8312 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX X/L DELTAZ

△ - 0.143 1.000 0.120

○ - 0.102

◊ - 0.226

PARAMETRIC VALUES

| | ALPHAB | MACH | 3.000 |
|--------|--------|--------|---------|
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

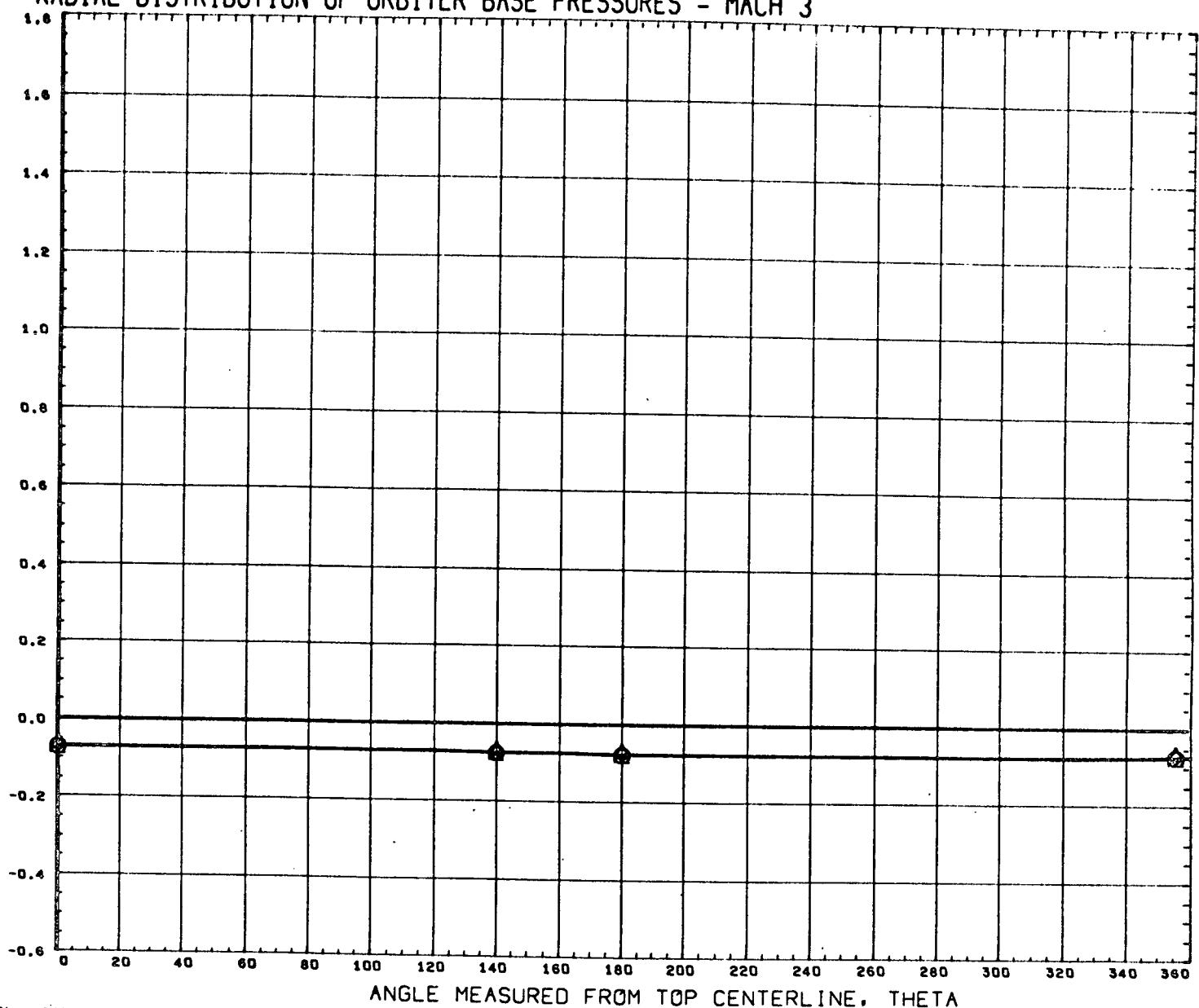
AEDC VA1163 MDAC ORBITER (BASE)

• IT8313 •

PAGE 369

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX X/L DELTAZ

○ - 0.144 1.000 0.151
△ 0.103 .
◊ 0.225 .

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|---------|
| ALPHAB | 0.008 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

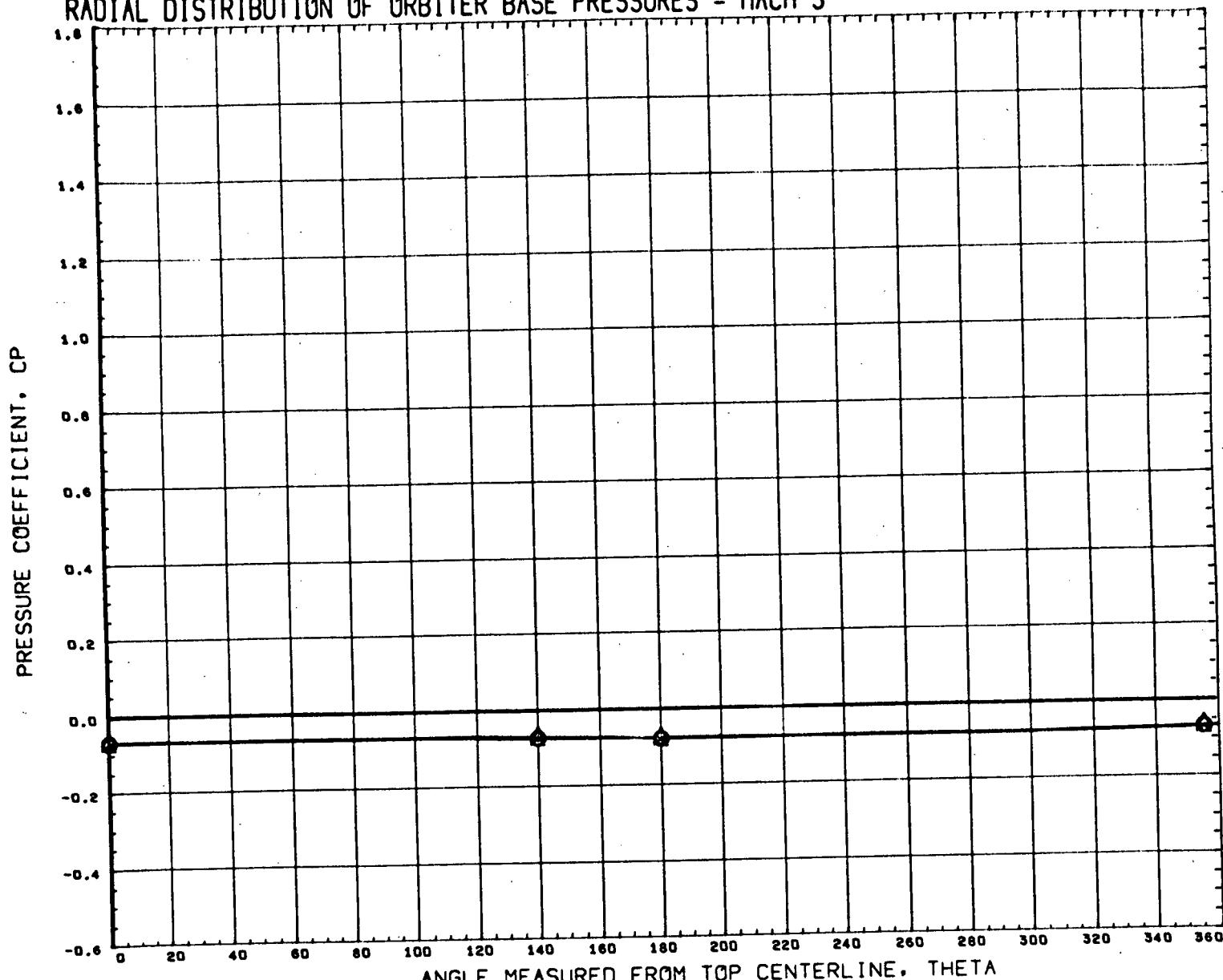
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8313 •

PAGE 370

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



SYMBOL DELTAX X/L DELTAZ
 O - 0.144 1.000 0.228
 △ 0.103
 D 0.227

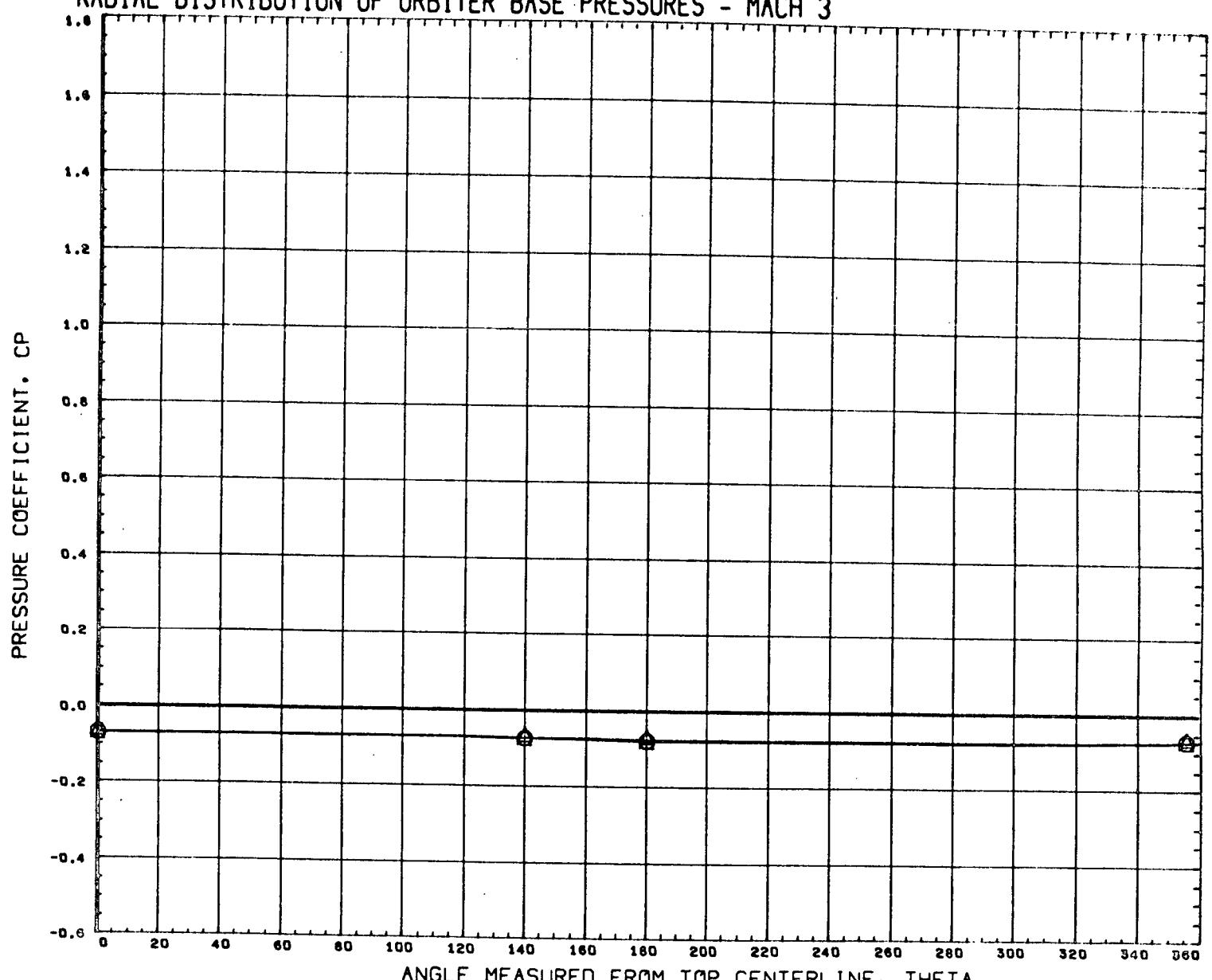
PARAMETRIC VALUES
 ALPHAB 0.008 MACH 3.000
 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

REFERENCE FILE
 AEDC VA1163 MDAC ORBITER (BASE)

• IT8313 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



SYMBOL DELTAX X/L DELTAZ
○ 0.390 1.000 0.908
△ 0.479

ANGLE MEASURED FROM TOP CENTERLINE, THETA

| PARAMETRIC VALUES | | |
|-------------------|--------|-----------------|
| ALPHAB | 0.008 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 100.000 |
| BSTPOW | 50.000 | |

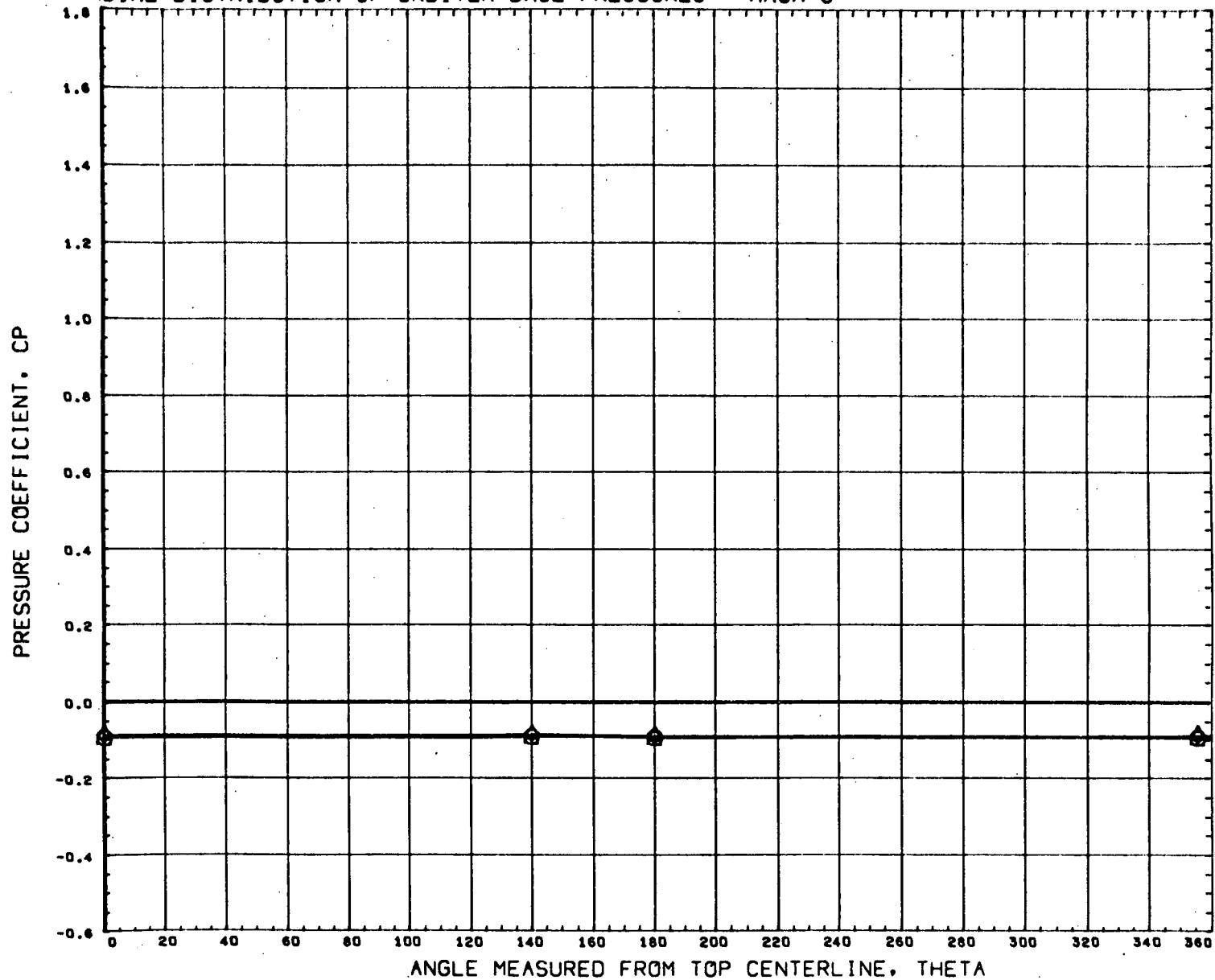
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

•IT8313•

PAGE 372

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



SYMBOL DELTAX X/L DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 1.000 | 0.120 |
| △ | - 0.103 | | |
| ◊ | - 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|---------|
| ALPHAB | 5.017 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

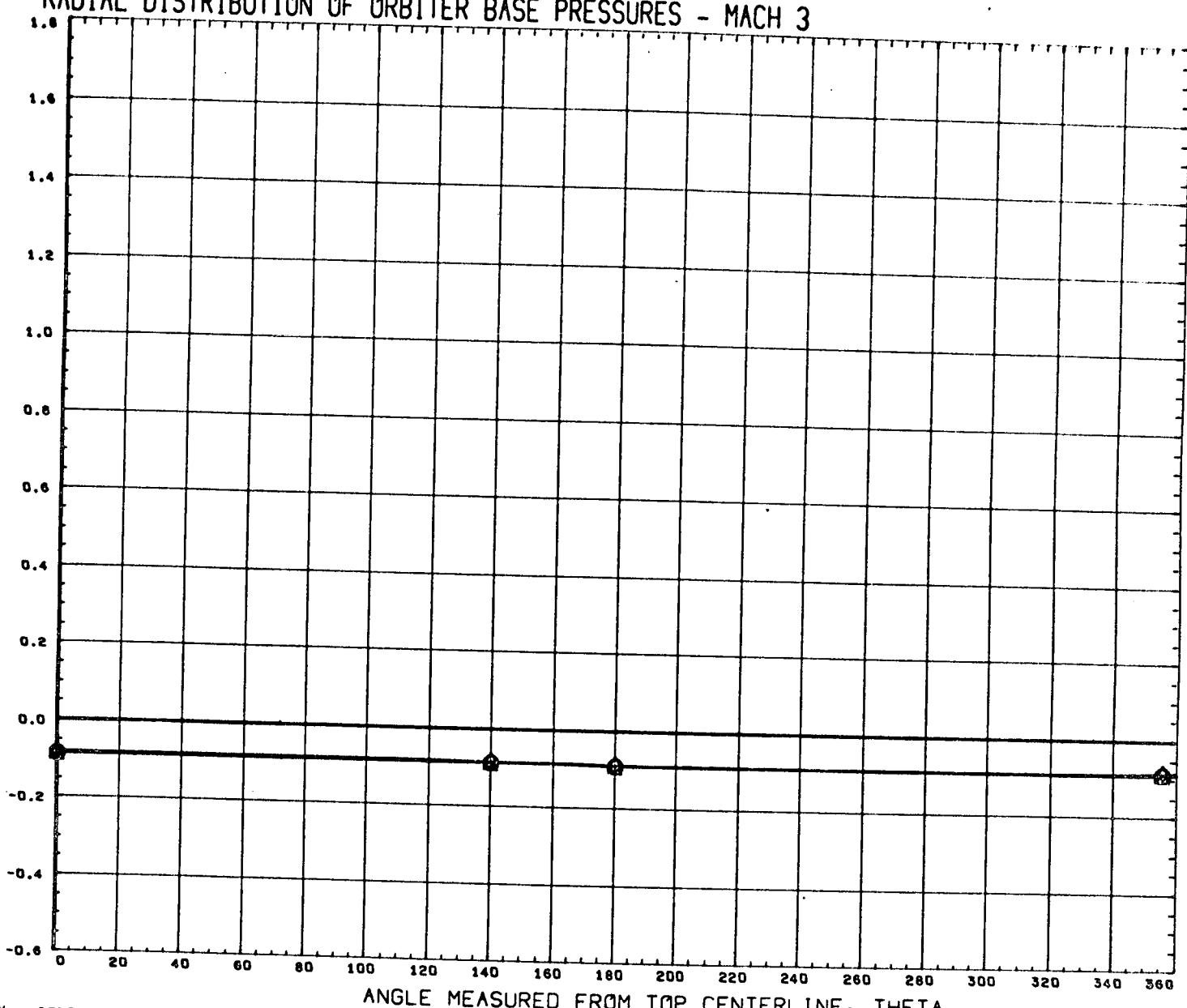
AEDC VA1163 MDAC ORBITER (BASE)

• IT8314 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



ANGLE MEASURED FROM TOP CENTERLINE, THETA

SYMBOL DELTAX X/L DELTAZ

△ - 0.144 1.000 0.151

○ 0.103

◊ 0.226

PARAMETRIC VALUES

| | ALPHAB | MACH | |
|--------|--------|--------|---------|
| ALPHAI | 5.017 | 3.000 | |
| BSTPOW | 0.000 | ORBPOW | 100.000 |
| | 50.000 | | |

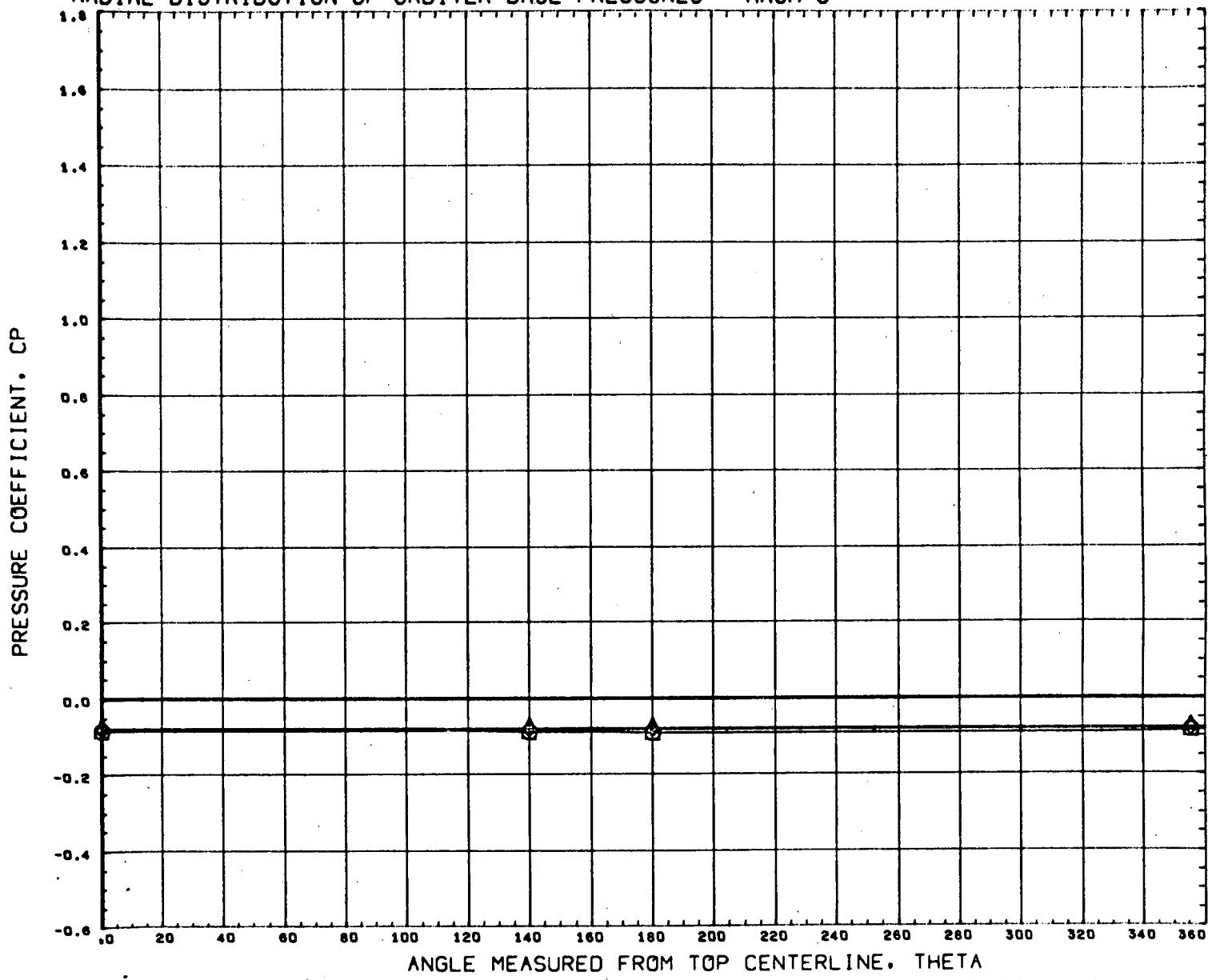
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8314 •

PAGE 374

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



SYMBOL DELTAX X/L DELTAZ

○ - 0.144 1.000 0.228

△ 0.103

◊ 0.227

PARAMETRIC VALUES

| | ALPHAB | MACH | ORBPOW |
|--------|--------|-------|---------|
| ALPHAB | 5.017 | 3.000 | |
| ALPHAI | 0.000 | | 100.000 |
| BSTPOW | 50.000 | | |

REFERENCE FILE

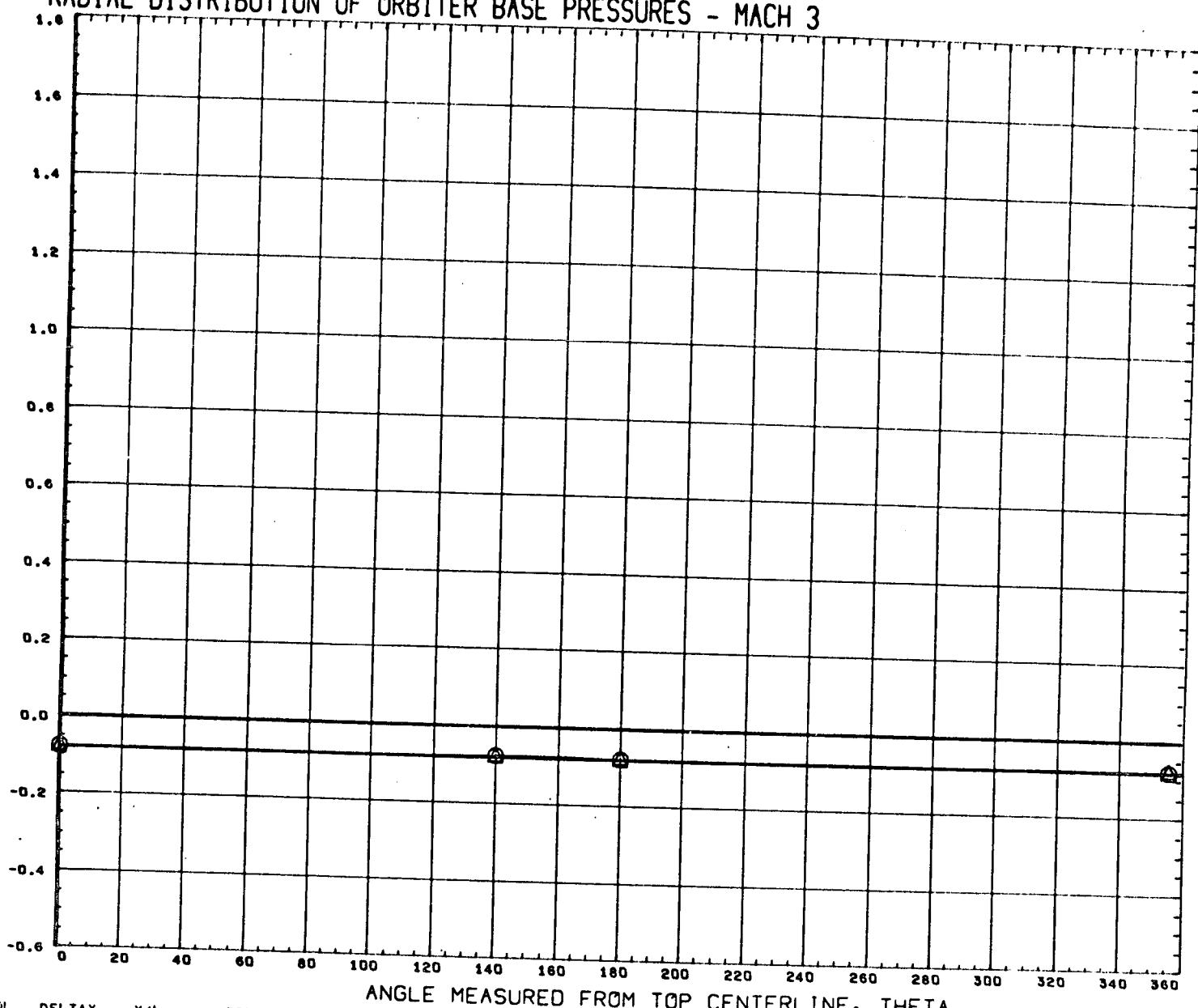
AEDC VA1163 MDAC ORBITER (BASE)

• IT8314 •

PAGE 375

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX X/L DELTAZ
 - 0.390 1.000 0.908
 0.521

PARAMETRIC VALUES
 ALPHAB 5.017 MACH 3.000
 ALPHAI 0.000 ORBPOW 100.000
 BSTPOW 50.000

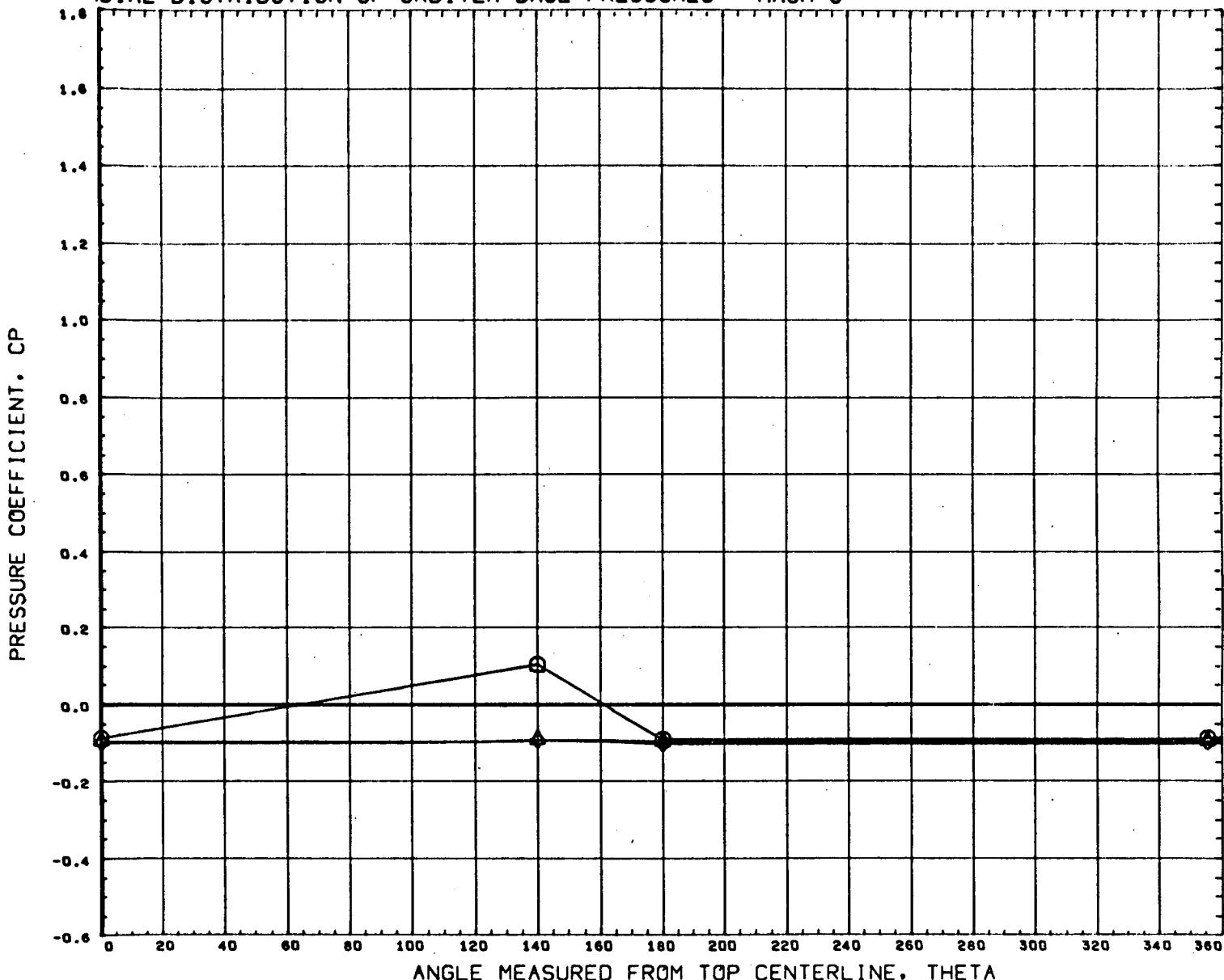
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8314 •

PAGE 376

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



SYMBOL DELTAX X/L DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 1.000 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.227 | | |

PARAMETRIC VALUES

| | | | |
|--------|--------|--------|---------|
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| ALPHAT | 0.000 | ORBPOW | 100.000 |
| BSTPOW | 50.000 | | |

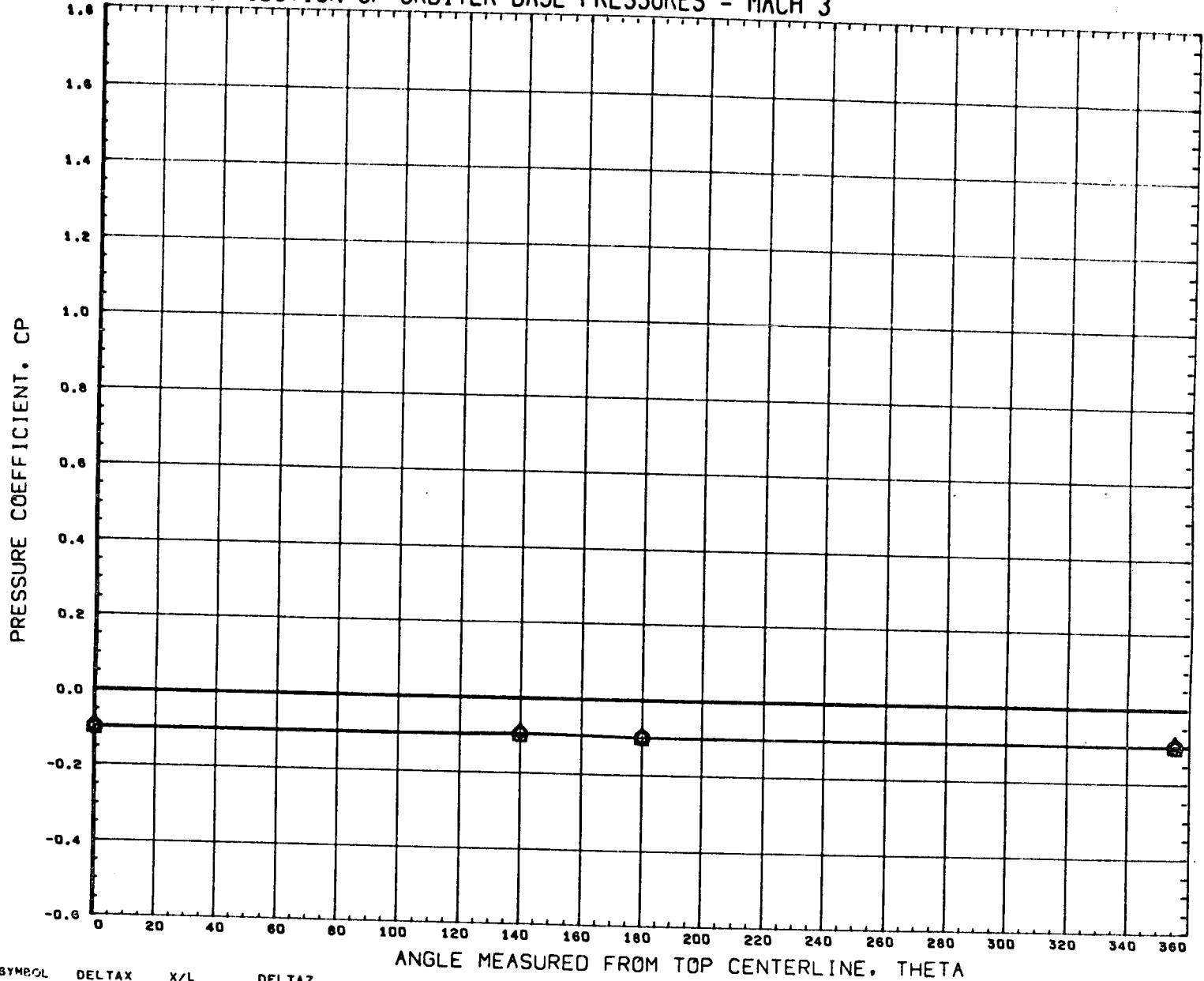
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8315 •

PAGE 377

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



SYMBOL DELTAX X/L DELTAZ

△ - 0.143 1.000 0.151

 0.104

◊ 0.226

PARAMETRIC VALUES

| | ALPHAB | MACH | |
|--------|--------|--------|---------|
| ALPHAI | 10.003 | 3.000 | |
| BSTPOW | 0.000 | ORBPOW | 100.000 |
| | 50.000 | | |

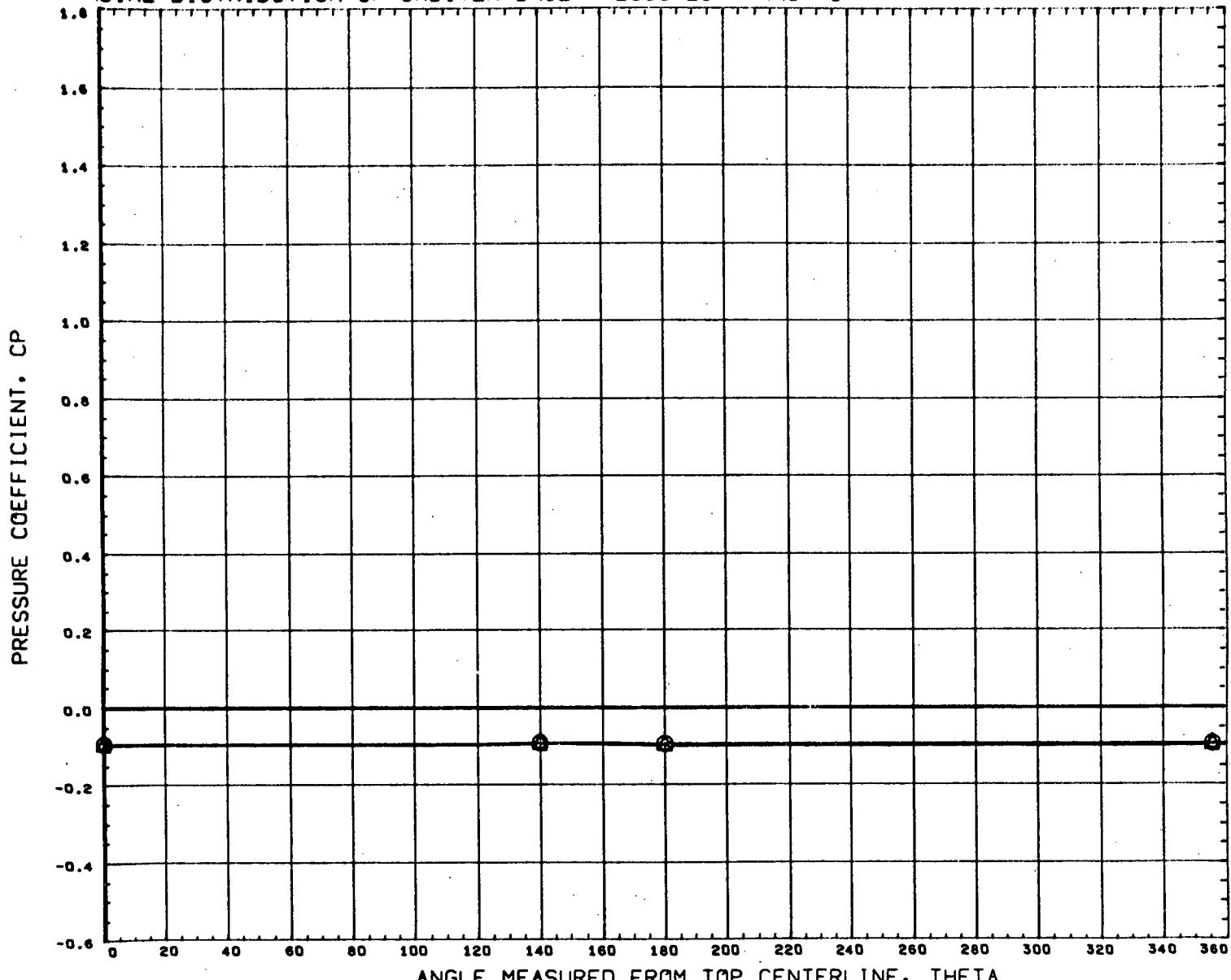
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8315 •

PAGE 378

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



SYMBOL DELTAX X/L DELTAZ

△ 0.143 1.000 0.228

◊ 0.103 0.226

PARAMETRIC VALUES

| | ALPHAB | MACH | ORBPOW |
|--------|--------|-------|---------|
| ALPHAI | 10.003 | 3.000 | 100.000 |
| BSTPOW | 0.000 | | |
| | 50.000 | | |

REFERENCE FILE

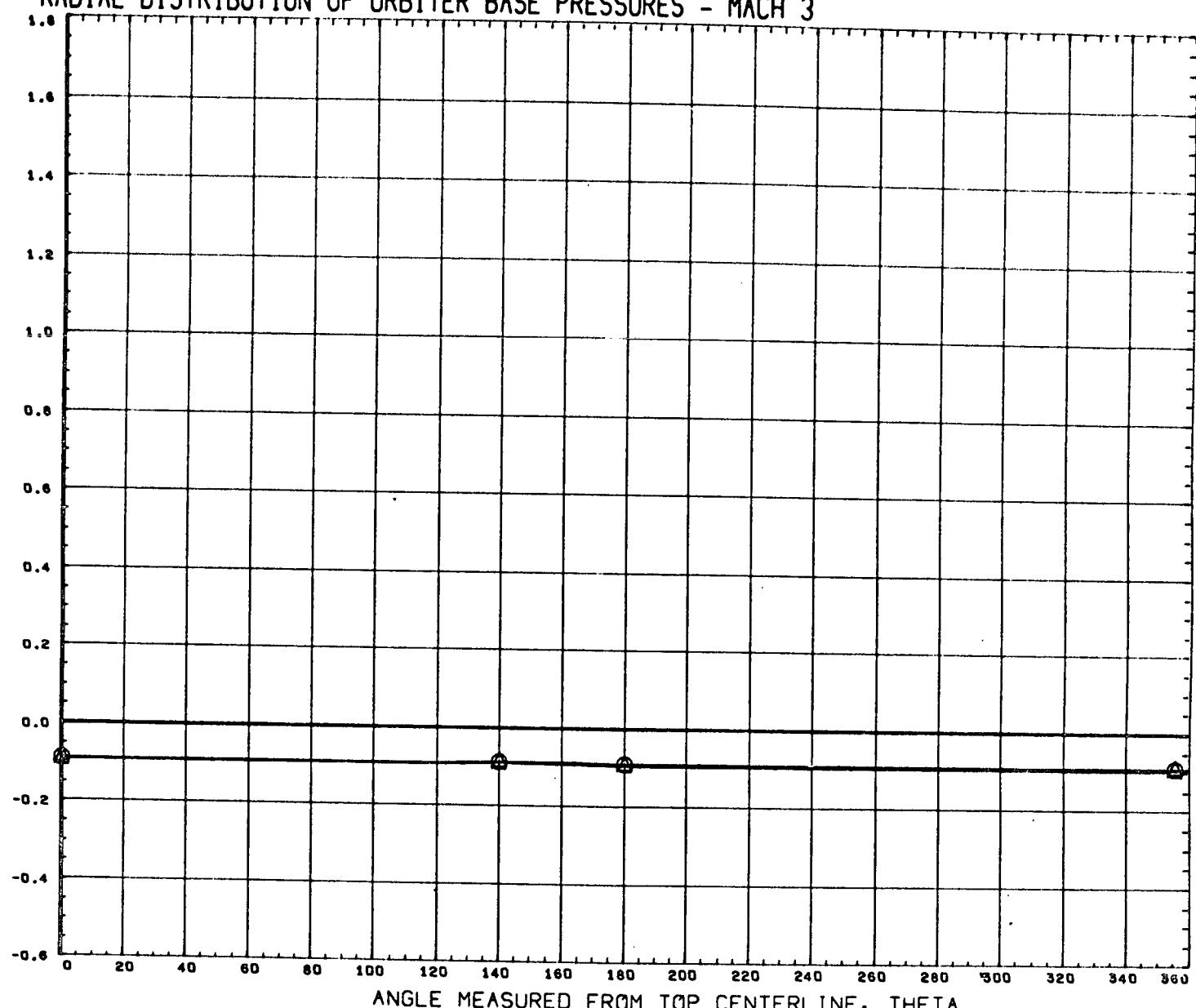
AEDC VA1163 MDAC ORBITER (BASE)

• IT8315 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX X/L DELTAZ
 O - 0.391 1.000 0.908
 △ 0.518

| | ALPHAB | MACH | 3.000 |
|--|--------|--------|---------|
| | ALPHAI | ORBPOW | 100.000 |
| | BSTPOW | | 50.000 |

REFERENCE FILE

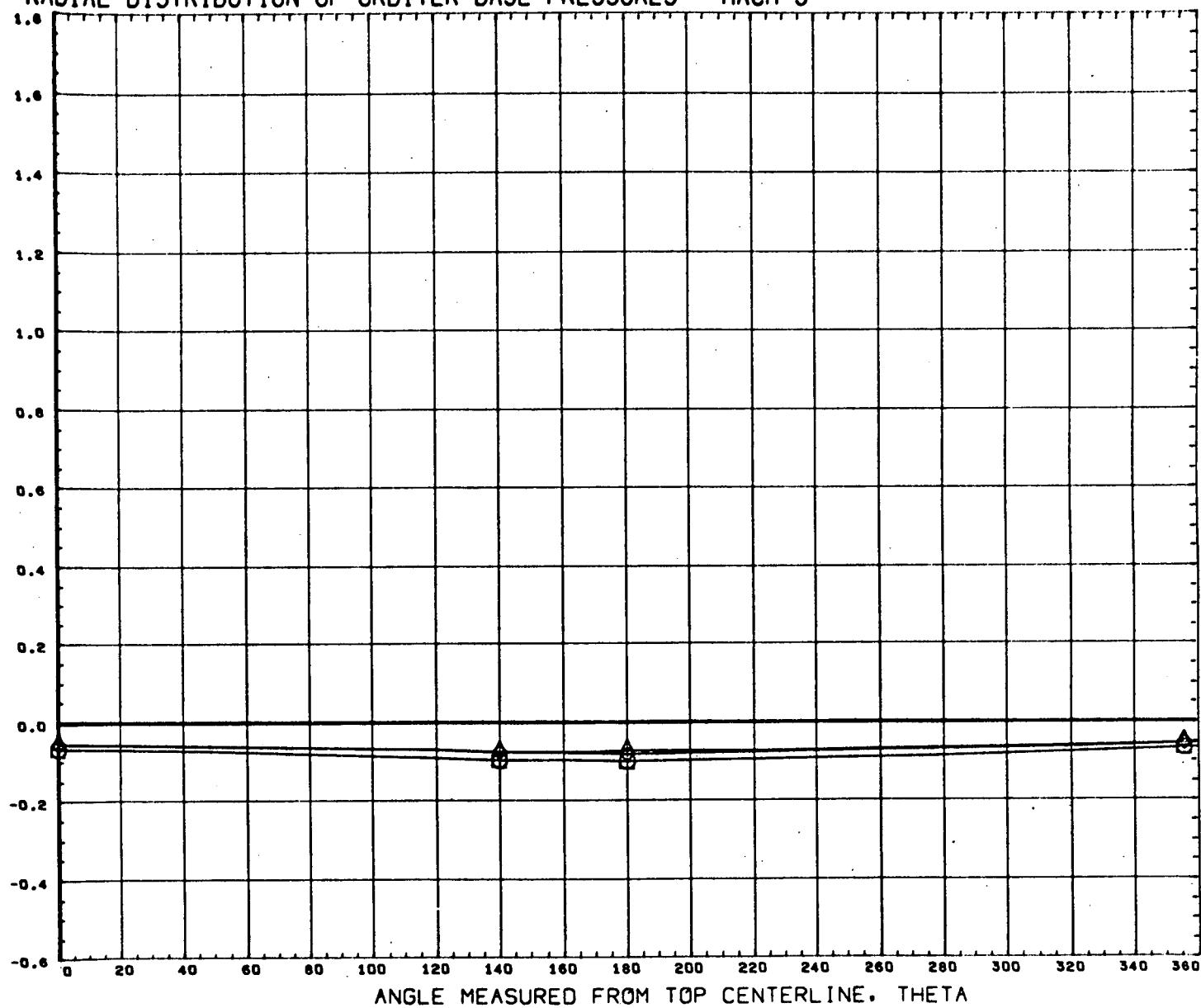
AEDC VA1163 MDAC ORBITER (BASE)

• IT8315 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX X/L DELTAZ

| | | | | |
|---|---|-------|-------|-------|
| ○ | - | 0.143 | 1.000 | 0.120 |
| △ | - | 0.103 | | |
| ◊ | - | 0.227 | | |

PARAMETRIC VALUES

| | | | | |
|--------|---|-------|--------|-------|
| ALPHAB | - | 9.977 | MACH | 3.000 |
| ALPHAI | - | 0.000 | ORBPOW | 0.000 |
| BSTPOW | - | 0.000 | | |

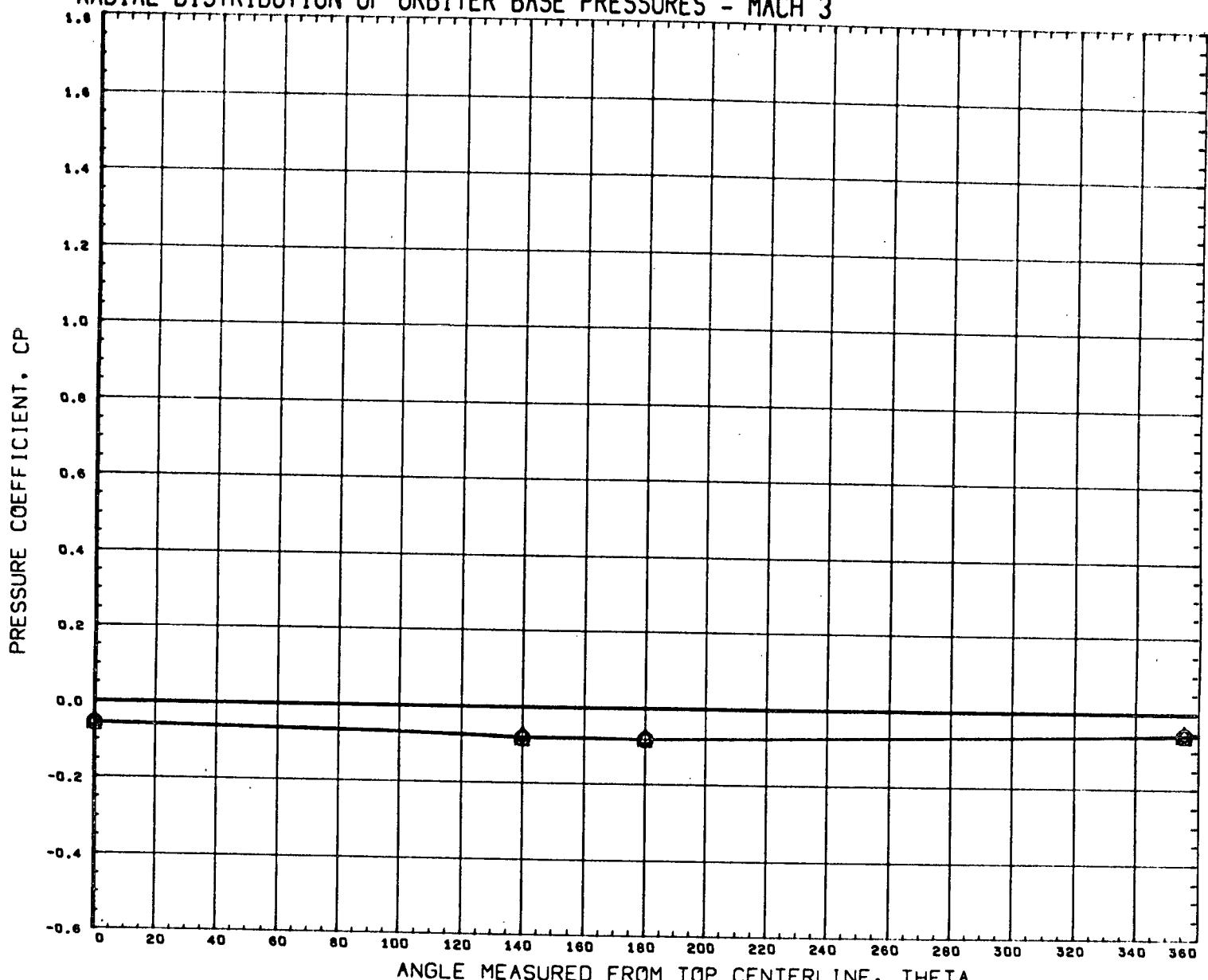
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8321 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



| SYMBOL | DELTAX | X/L | DELTAZ |
|------------|---------|-------|--------|
| Δ | - 0.144 | 1.000 | 0.151 |
| Δ | 0.103 | | |
| \diamond | 0.227 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|-------|
| ALPHAB | - 9.977 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

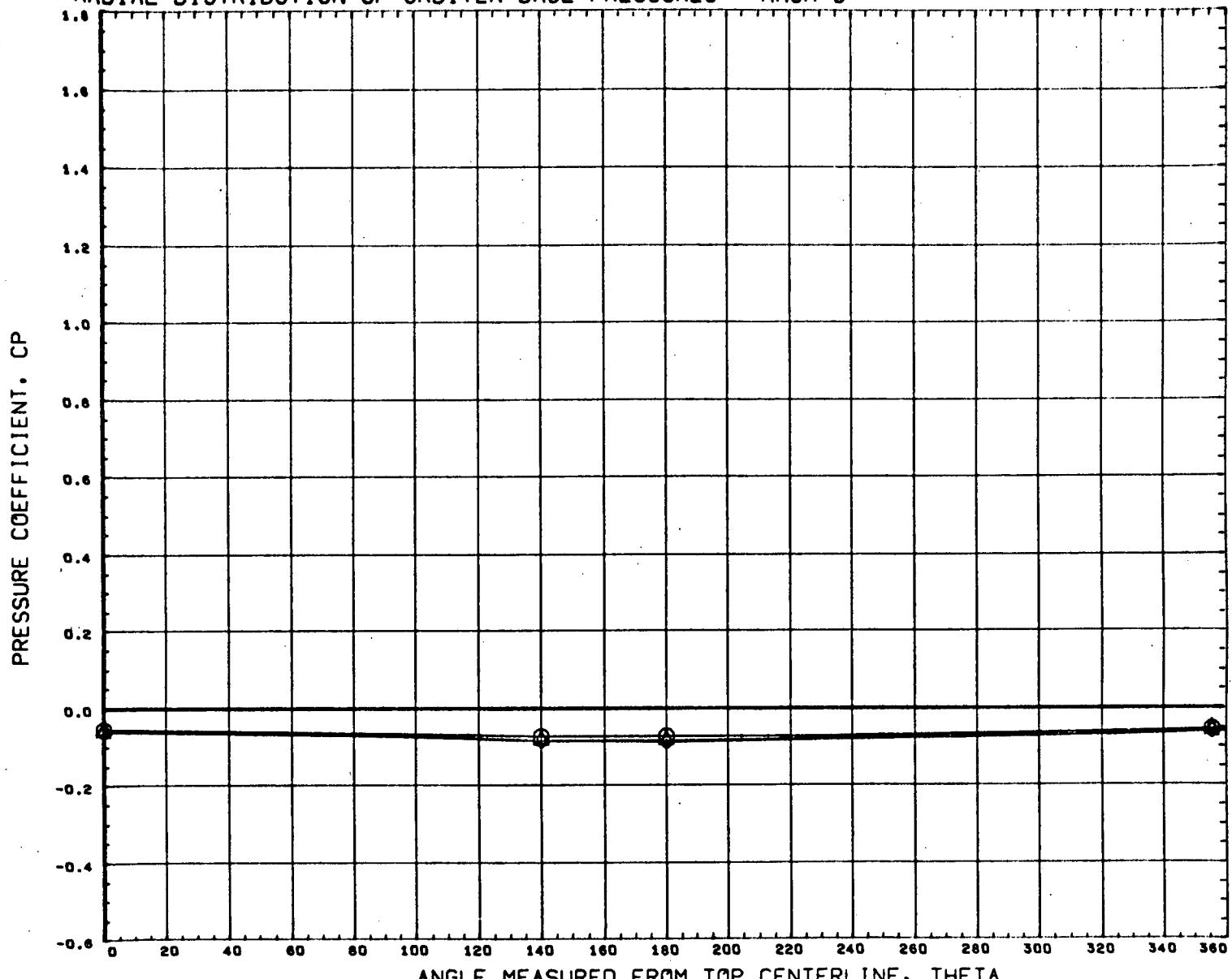
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8321 •

PAGE 382

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



SYMBOL DELTAX X/L DELTAZ

| | | | |
|------------|---------|-------|-------|
| Δ | - 0.143 | 1.000 | 0.228 |
| | 0.103 | | |
| \diamond | 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|---------|--------|-------|
| ALPHAB | - 9.977 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

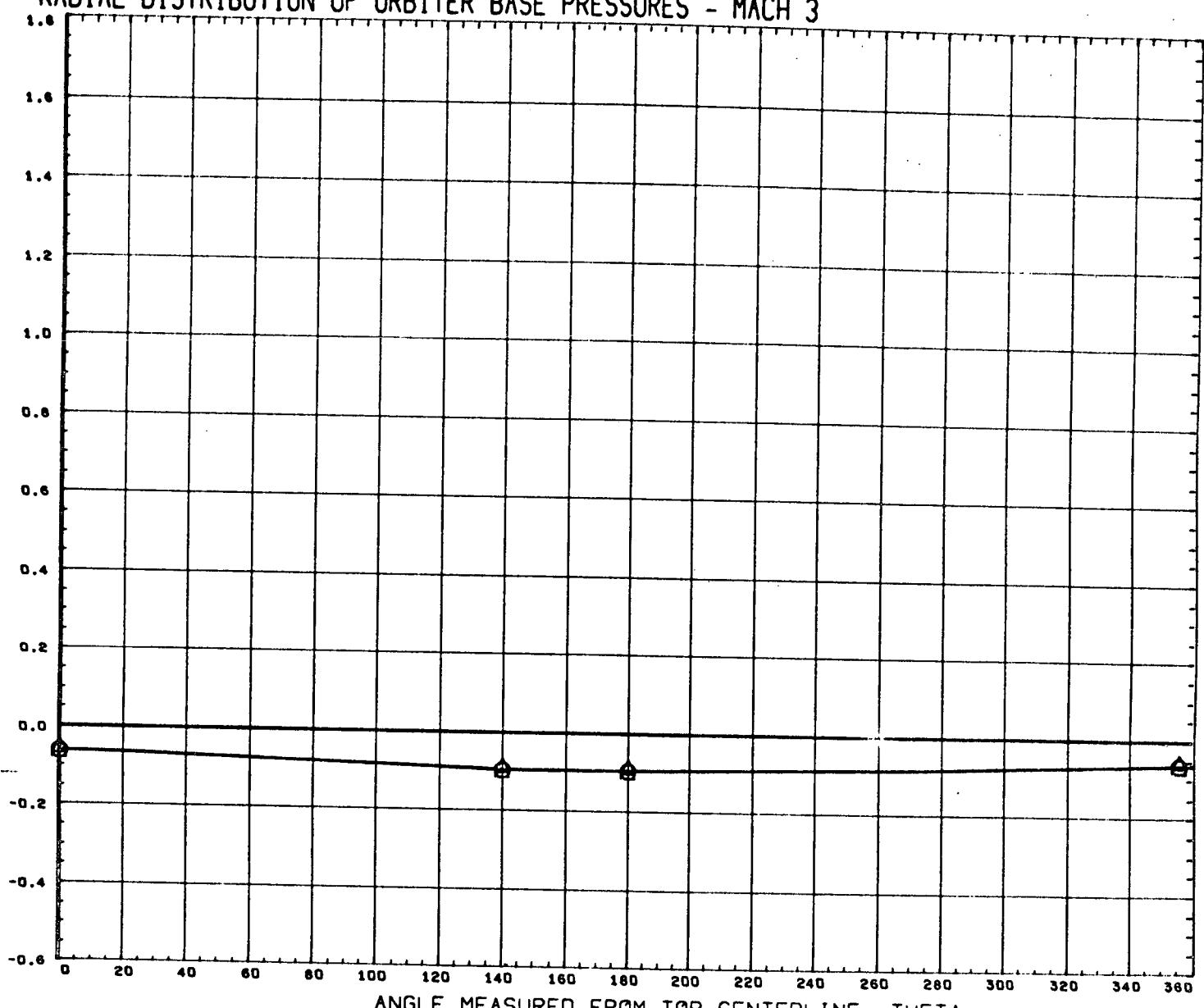
AEDC VA1163 MDAC ORBITER (BASE)

• IT8321 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX X/L DELTAZ

Δ - 0.391 1.000 0.908

Δ 0.516

PARAMETRIC VALUES

| | | | | |
|--------|---|-------|--------|-------|
| ALPHAB | = | 9.977 | MACH | 3.000 |
| ALPHAI | = | 0.000 | ORBPOW | 0.000 |
| BSTPOW | = | | | |

REFERENCE FILE

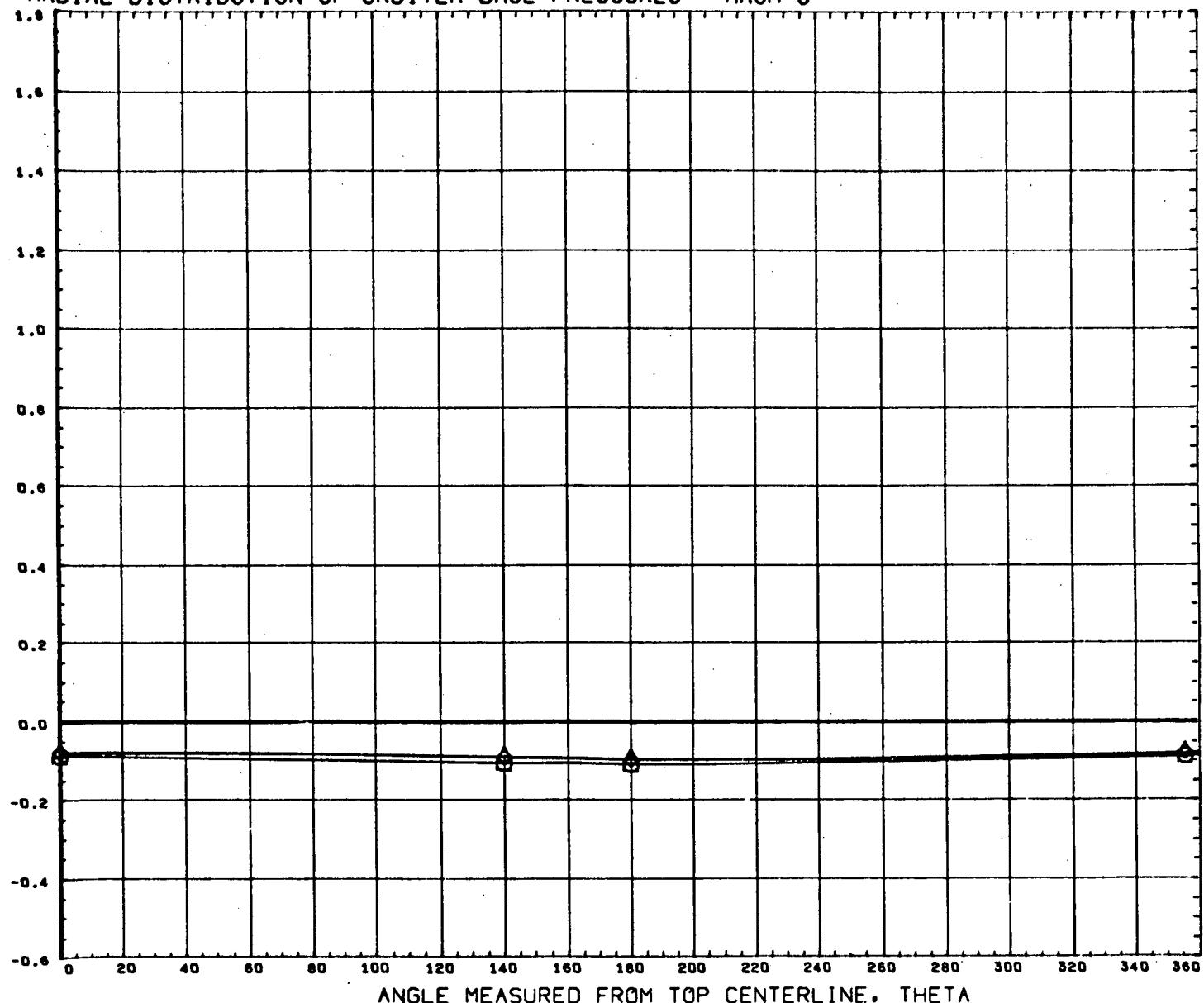
AEDC VA1163 MDAC ORBITER (BASE)

• IT8321 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



| SYMBOL | DELTAX | X/L | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 1.000 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|-------|
| ALPHAB | - 4.939 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

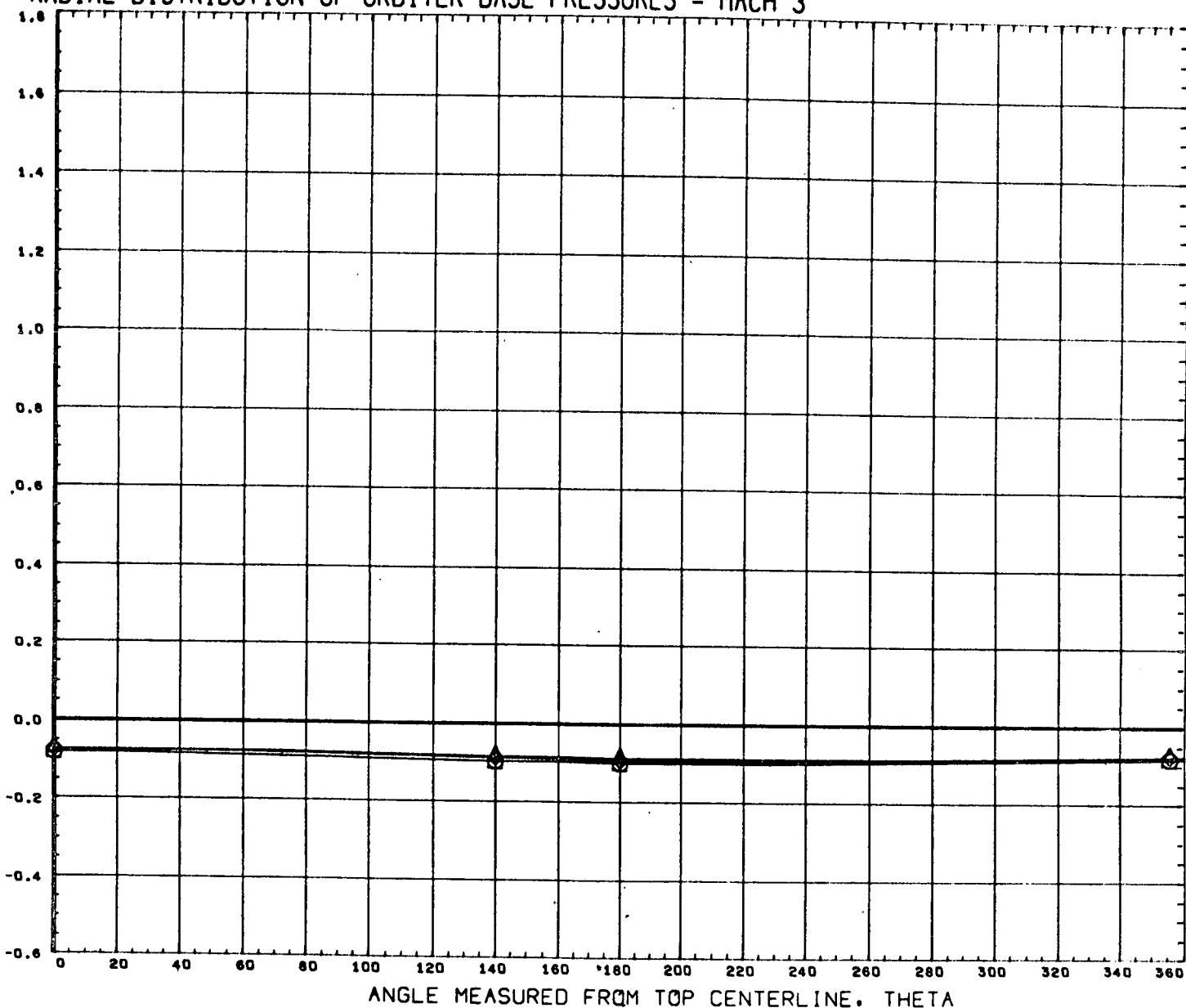
AEDC VA1163 MDAC ORBITER (BASE)

• IT8322 •

PAGE 385

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



| SYMBOL | DELTAX | X/L | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.144 | 1.000 | 0.151 |
| △ | 0.101 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|-------|
| ALPHAB | - 4.939 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

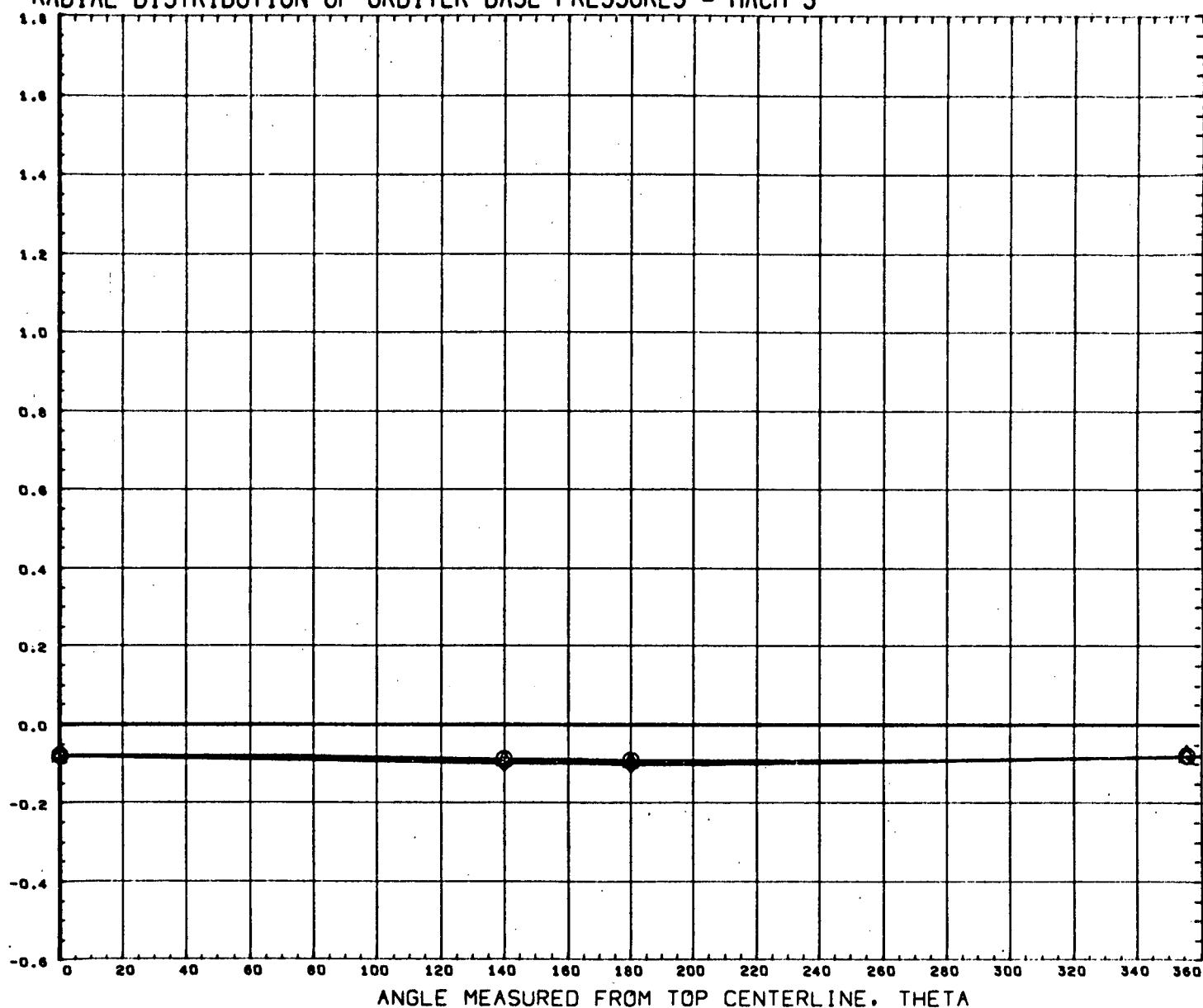
AEDC VA1163 MDAC ORBITER (BASE)

• IT8322 •

PAGE 386

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



| SYMBOL | DELTAX | X/L | DELTAZ |
|--------|---------|-------|--------|
| ○ | - 0.143 | 1.000 | 0.228 |
| △ | 0.104 | | |
| ◊ | 0.227 | | |

| PARAMETRIC VALUES | | |
|-------------------|---------|--------------|
| ALPHAB | - 4.939 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

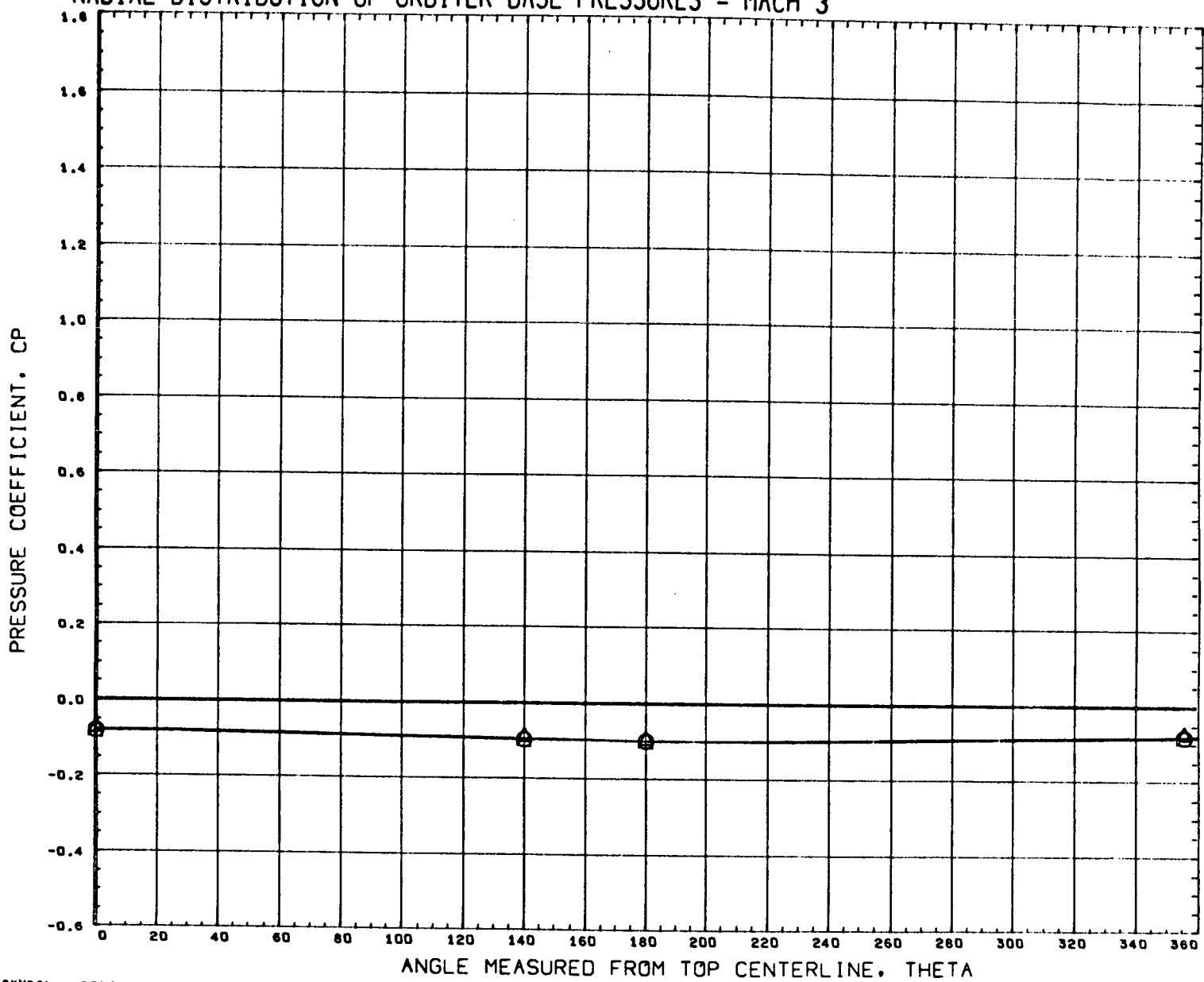
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8322 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



SYMBOL DELTAX X/L DELTAZ
○ - 0.391 1.000 0.908
△ 0.516

PARAMETRIC VALUES
 ALPHAB - 4.939 MACH 3.000
 ALPHA1 0.000 ORBPOW 0.000
 BSTPOW 0.000

REFERENCE FILE

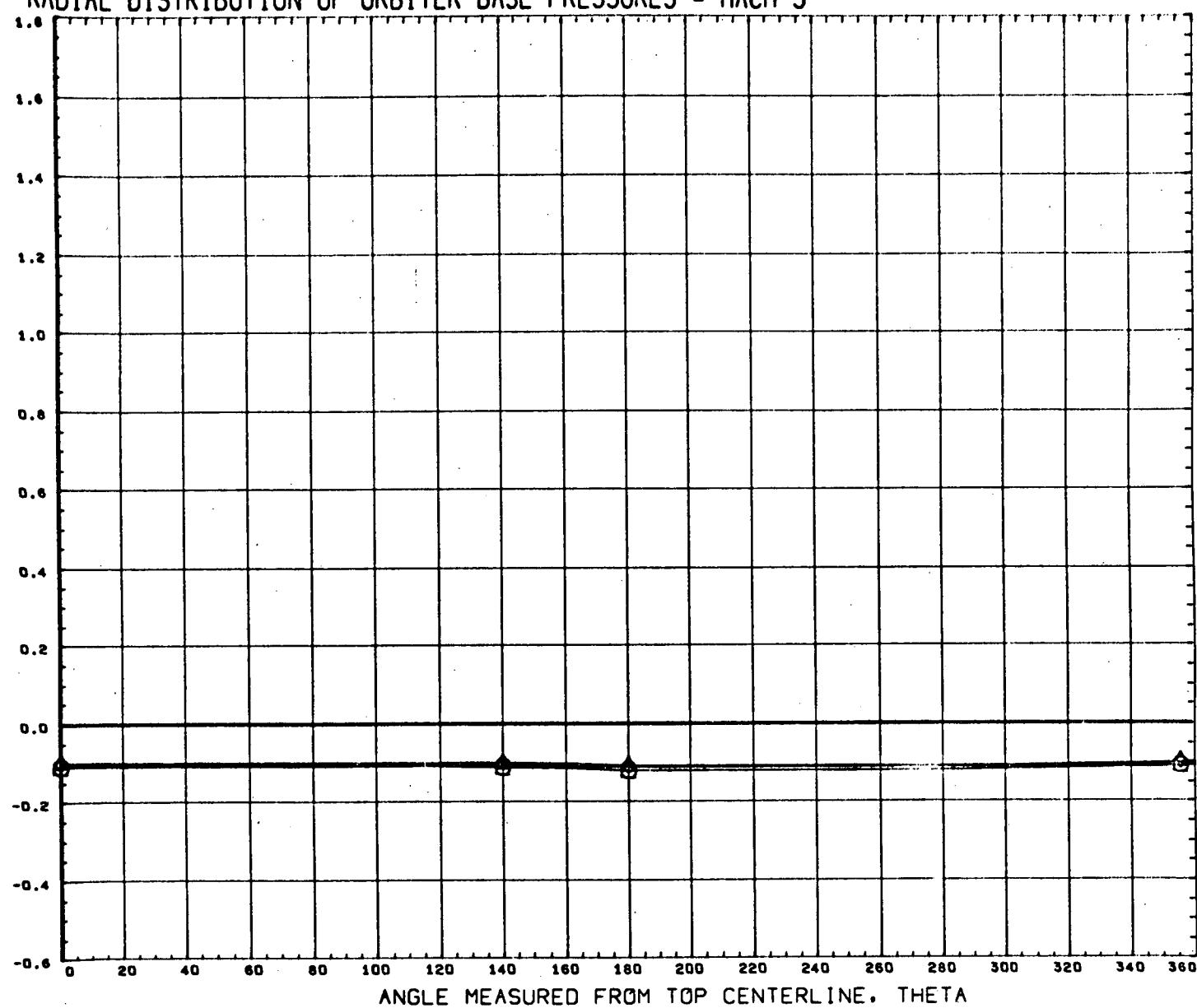
AEDC VA1163 MDAC ORBITER (BASE)

• IT8322 •

PAGE 388

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX X/L DELTAZ

| | | | | |
|-------------|---|-------|-------|-------|
| \circ | - | 0.143 | 1.000 | 0.120 |
| \triangle | - | 0.103 | | |
| \diamond | - | 0.226 | | |

PARAMETRIC VALUES

| | | | |
|--------|-------|--------|-------|
| ALPHAB | 0.019 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

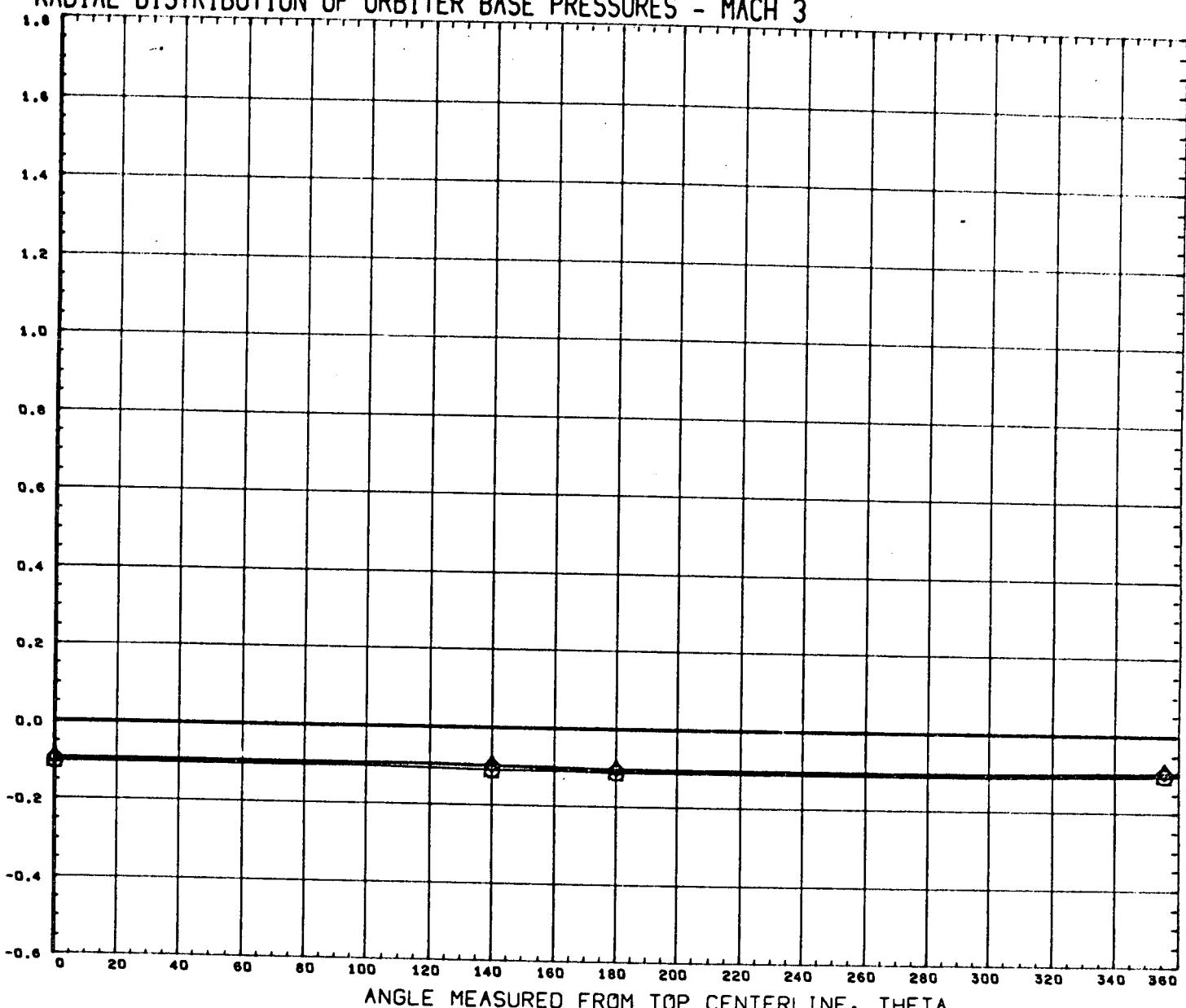
AEDC VA1163 MDAC ORBITER (BASE)

• IT8323 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX X/L DELTAZ

○ - 0.144 1.000 0.151
 △ 0.104
 ◇ 0.227

ANGLE MEASURED FROM TOP CENTERLINE, THETA

| PARAMETRIC VALUES | | | |
|-------------------|-------|--------|-------|
| ALPHAB | 0.019 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

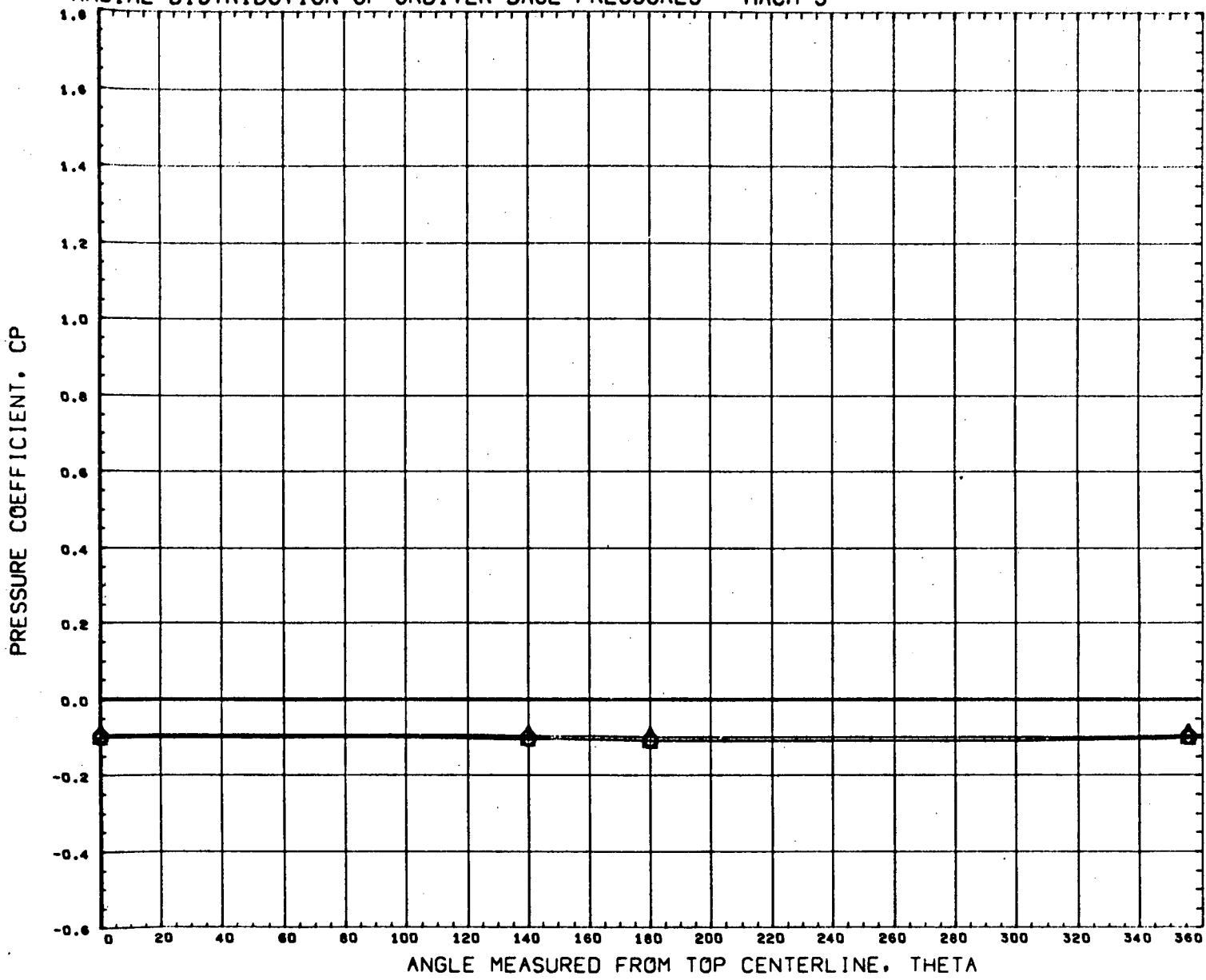
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8323 •

PAGE 390

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



SYMBOL DELTAX X/L DELTAZ

| | | | |
|---|---------|-------|-------|
| ○ | - 0.143 | 1.000 | 0.226 |
| △ | - 0.103 | | |
| ◊ | - 0.227 | | |

PARAMETRIC VALUES

| | | | |
|--------|-------|--------|-------|
| ALPHAB | 0.019 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

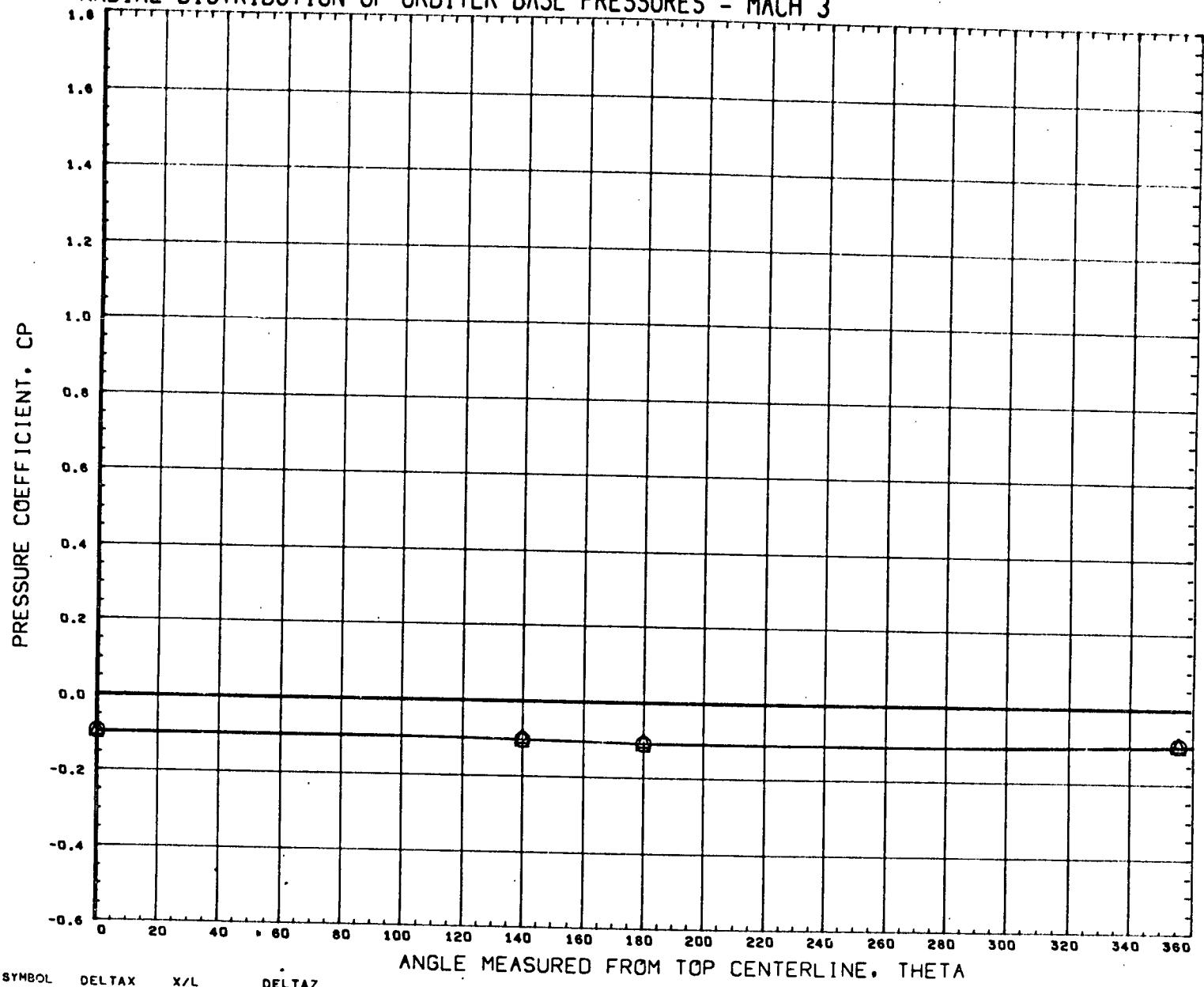
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8323 •

PAGE 391

RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



SYMBOL DELTAX X/L DELTAZ
 Δ - 0.391 1.000 0.908
 O 0.514

PARAMETRIC VALUES
 ALPHAB 0.019 MACH 3.000
 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

REFERENCE FILE

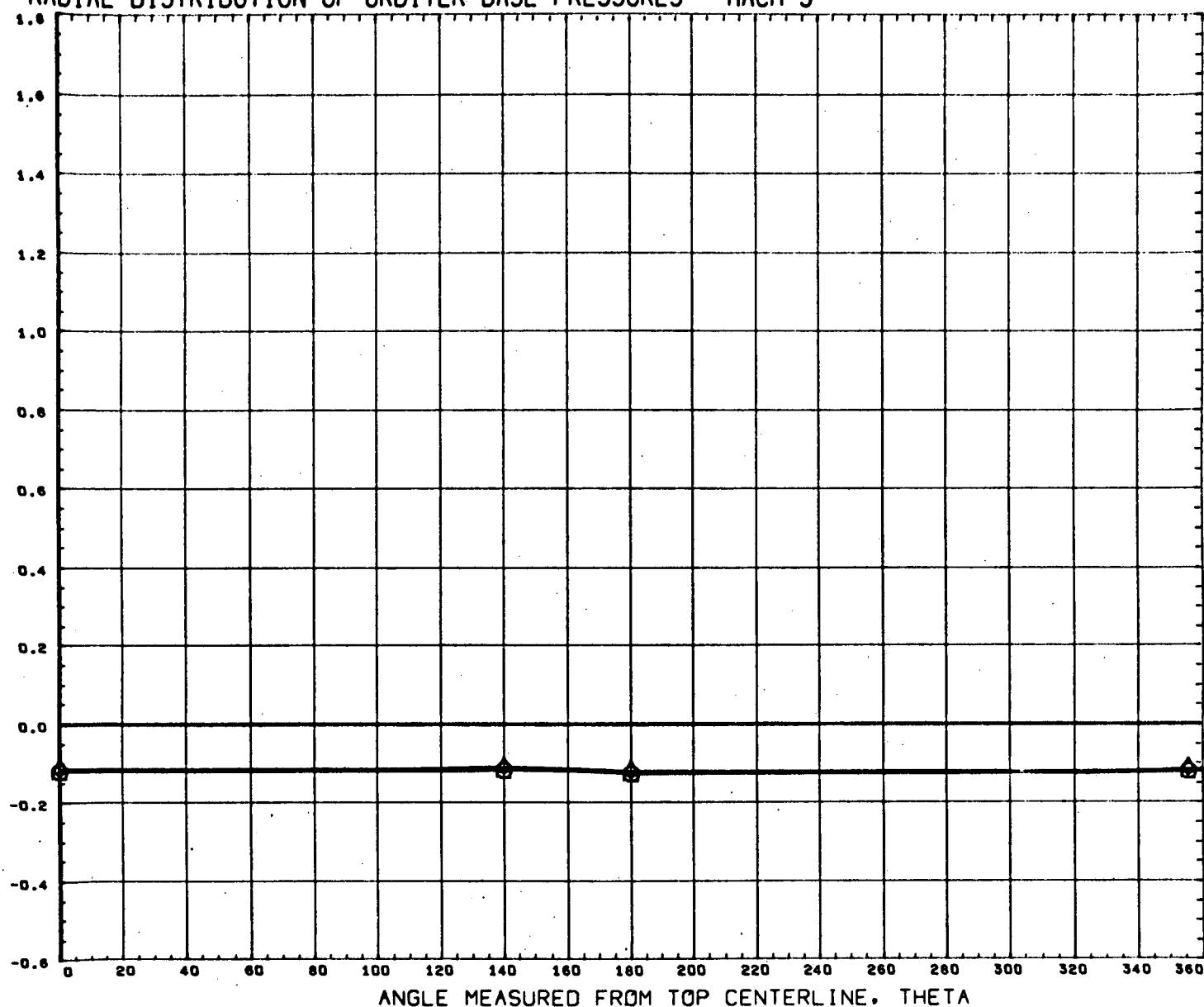
AEDC VA1163 MDAC ORBITER (BASE)

• IT8323 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



| SYMBOL | DELTAX | X/L | DELTAZ |
|--------|--------|-------|--------|
| ○ | -0.143 | 1.000 | 0.120 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | | |
|-------------------|-------|--------|-------|
| ALPHAB | 5.020 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

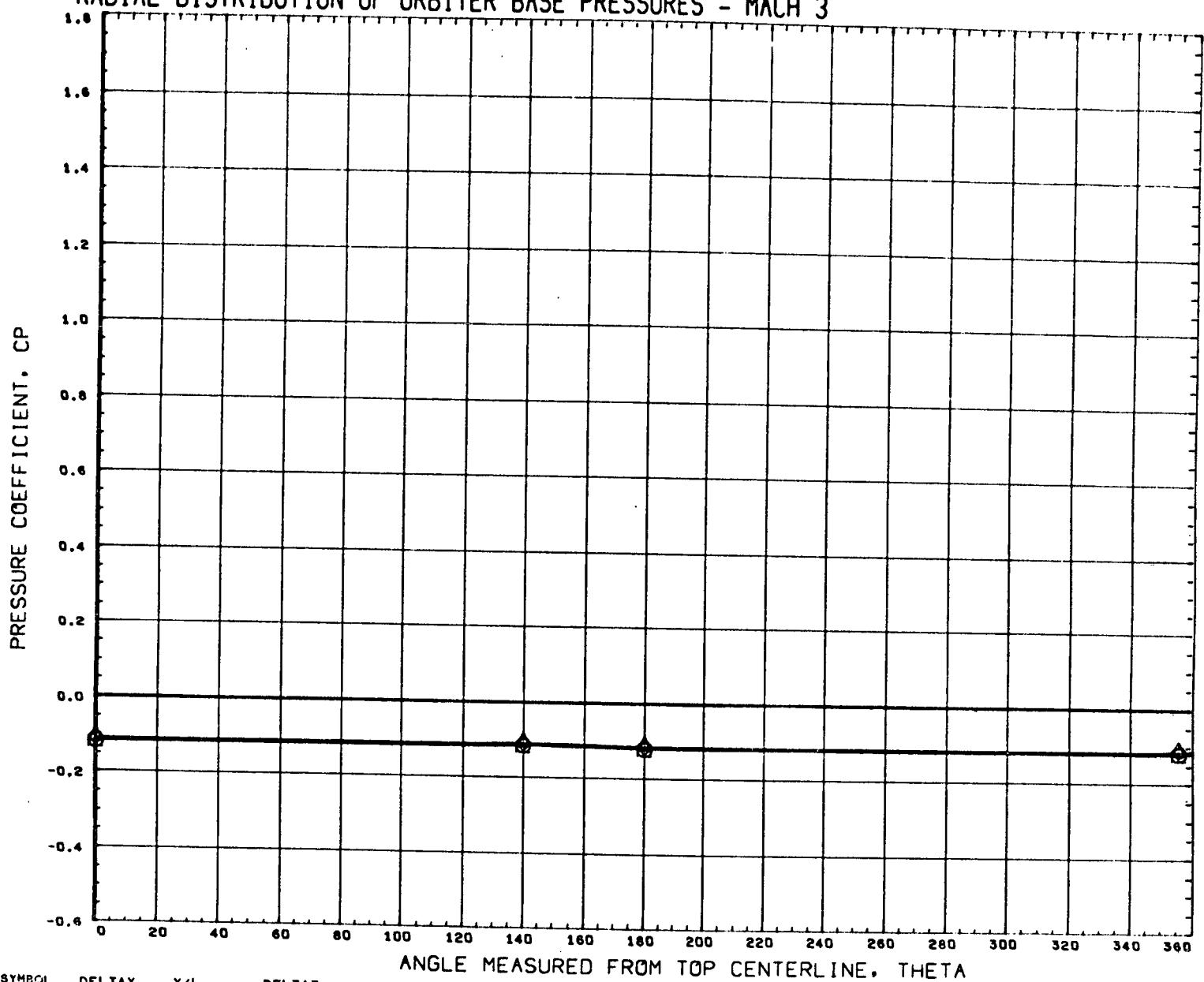
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8324 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



SYMBOL DELTAX X/L DELTAZ
 □ - 0.143 1.000 0.151
 ▲ 0.103
 ◇ 0.227

ANGLE MEASURED FROM TOP CENTERLINE, THETA

| PARAMETRIC VALUES | | | |
|-------------------|-------|--------|-------|
| ALPHAB | 5.020 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

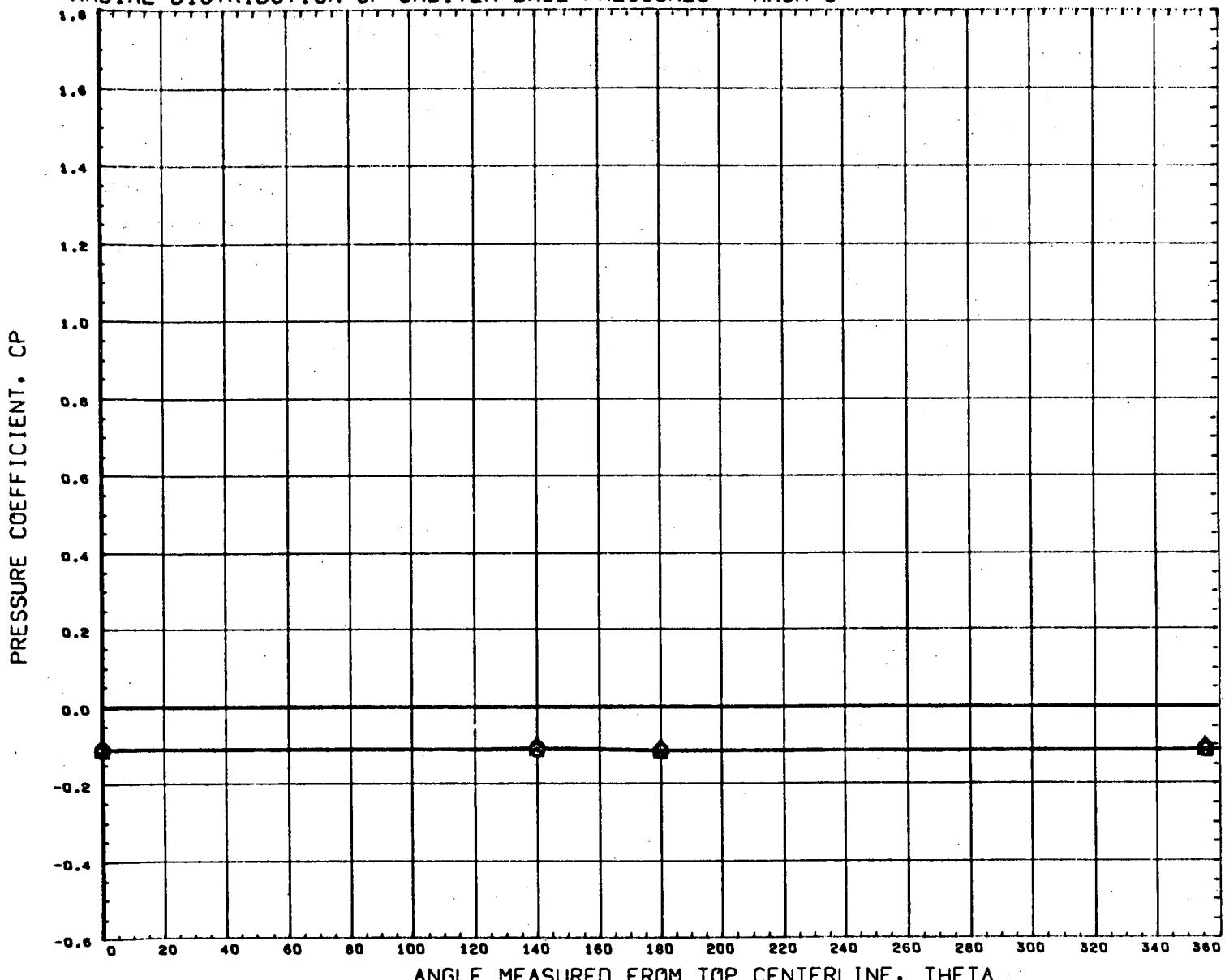
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8324 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



REFERENCE FILE

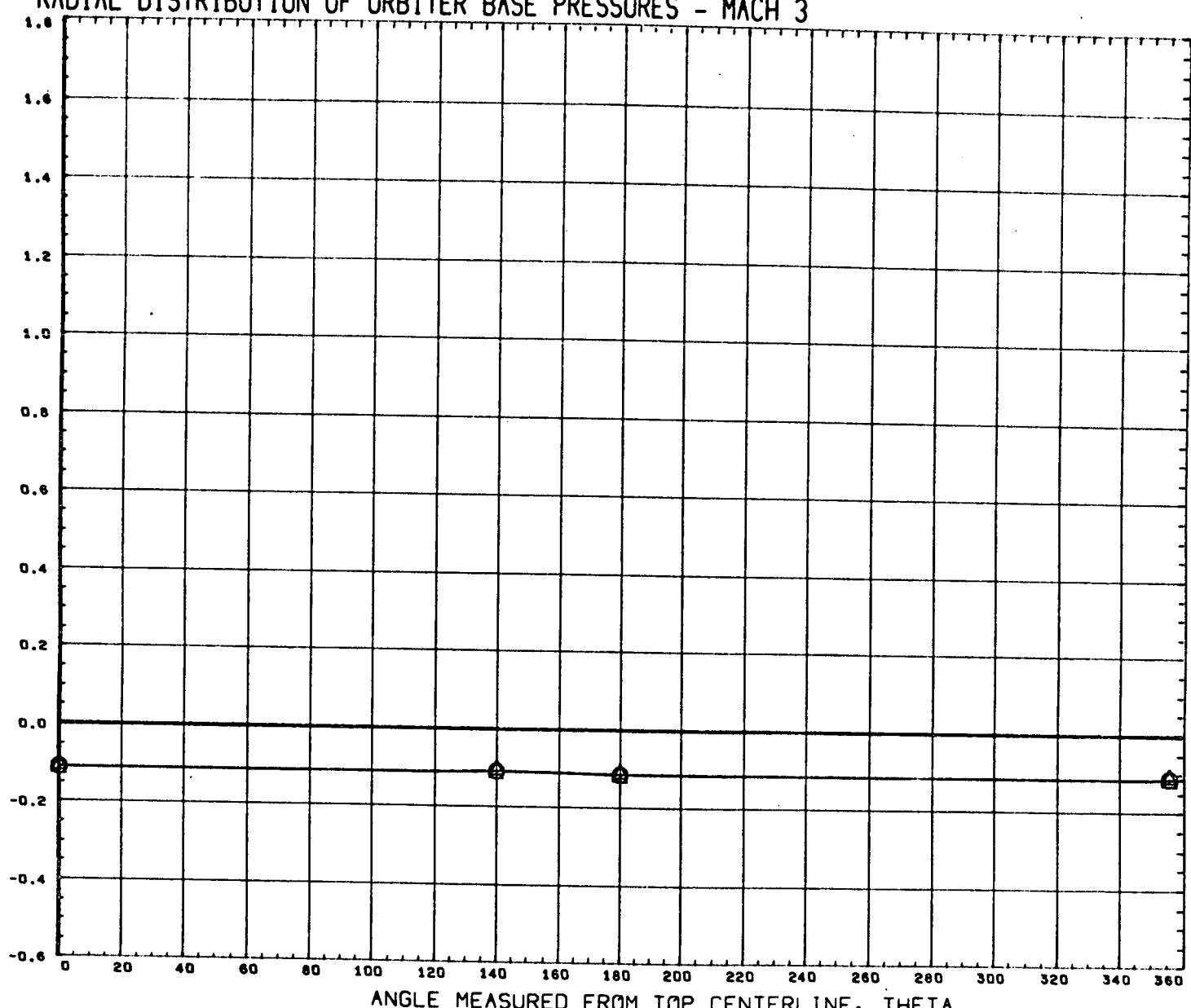
AEDC VA1163 MDAC ORBITER (BASE)

• IT8324 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX X/L DELTAZ
 O - 0.390 1.000 0.908
 △ 0.511

| PARAMETRIC VALUES | | | |
|-------------------|-------|--------|-------|
| ALPHAB | 5.020 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

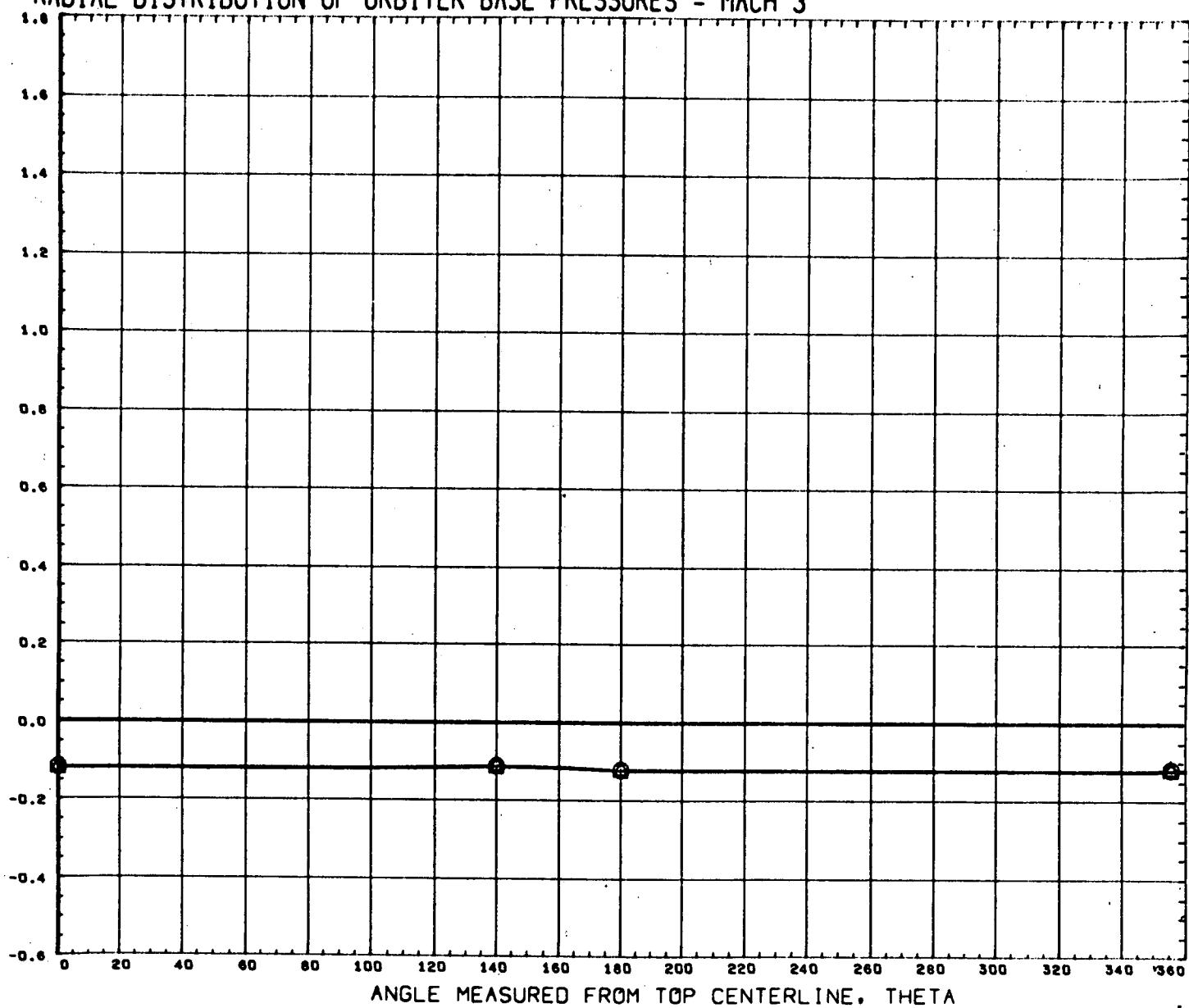
AEDC VA1163 MDAC ORBITER (BASE)

• IT8324 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX X/L DELTAZ

△ 0.143 1.000 0.120

○ 0.101

◊ 0.226

PARAMETRIC VALUES

| | ALPHAB | MACH | ORBPOW |
|--------|--------|-------|--------|
| ALPHAI | 10.004 | 3.000 | 0.000 |
| BSTPOW | 0.000 | | |

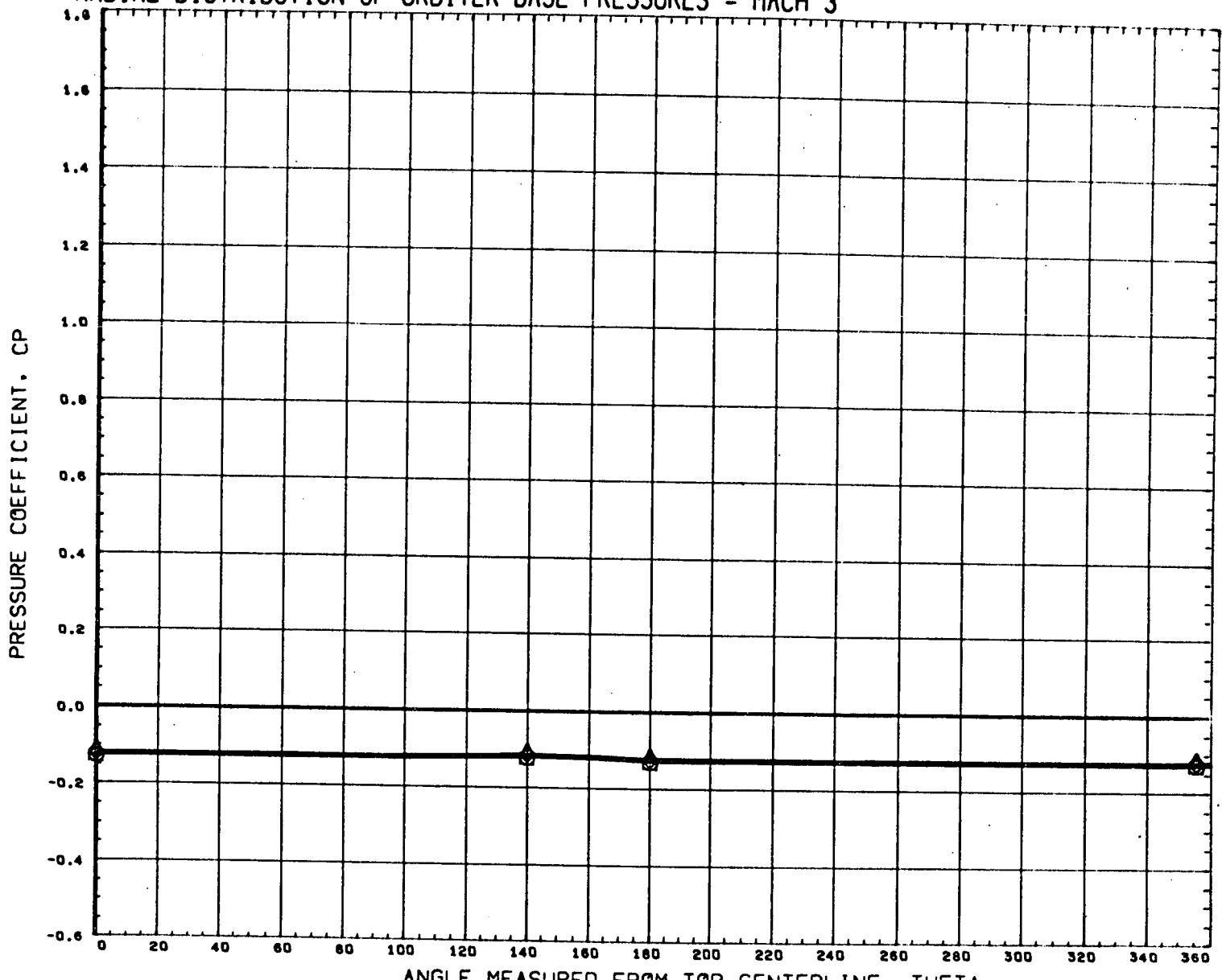
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8325 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



| SYMBOL | DELTA X | X/L | DELTA Z |
|--------|---------|-------|---------|
| ○ | -0.143 | 1.000 | 0.151 |
| △ | 0.103 | | |
| ◊ | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|--------|
| ALPHAB | 10.004 | MACH |
| ALPHAI | 0.000 | ORBPOW |
| B8TPOW | 0.000 | |

REFERENCE FILE

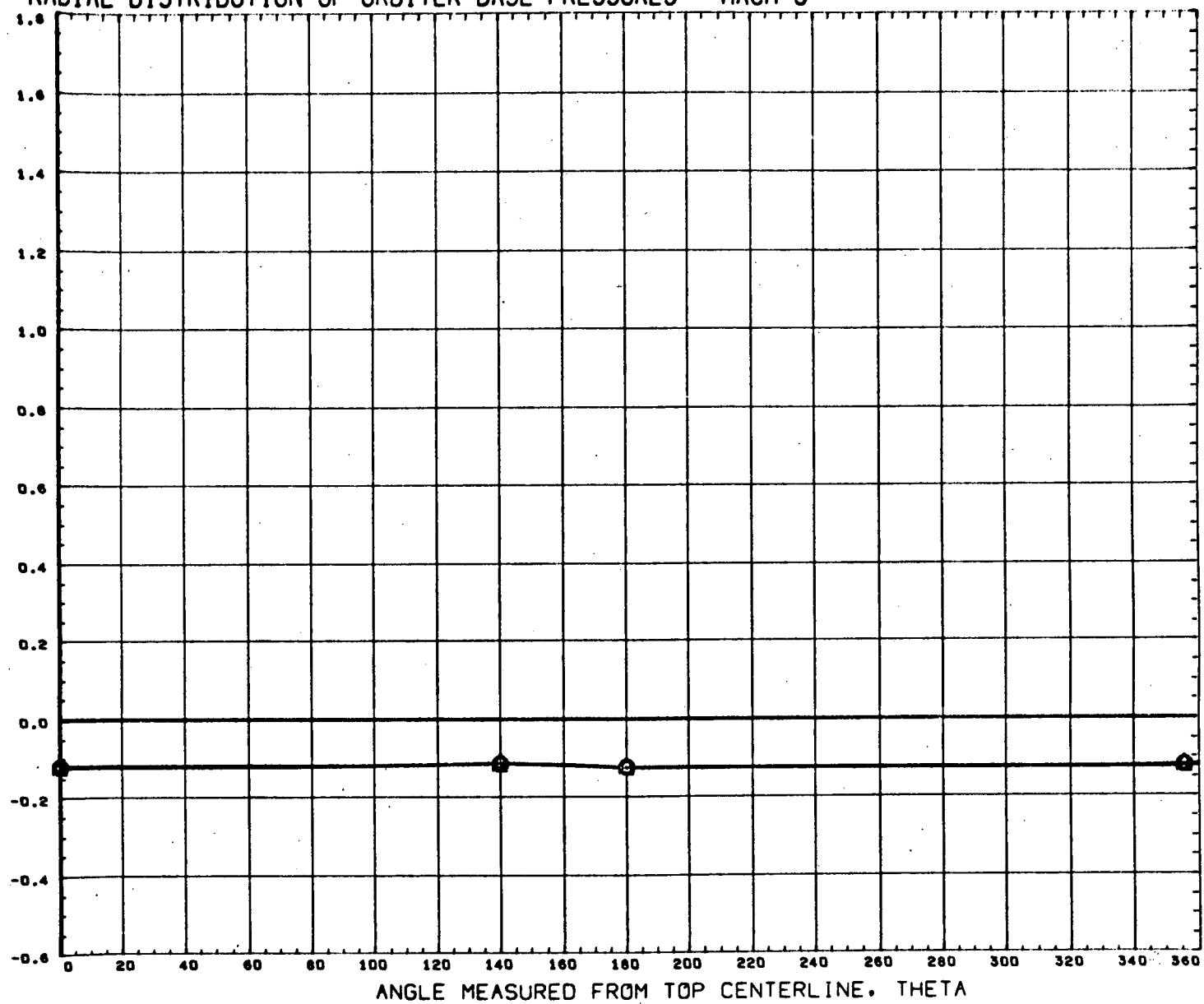
AEDC VA1163 MDAC ORBITER (BASE)

• IT8325 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



| SYMBOL | DELTAX | X/L | DELTAZ |
|-------------|---------|-------|--------|
| \circ | - 0.144 | 1.000 | 0.226 |
| \diamond | 0.103 | | |
| \triangle | 0.226 | | |

| PARAMETRIC VALUES | | |
|-------------------|--------|--------------|
| ALPHAB | 10.004 | MACH 3.000 |
| ALPHAI | 0.000 | ORBPOW 0.000 |
| BSTPOW | 0.000 | |

REFERENCE FILE

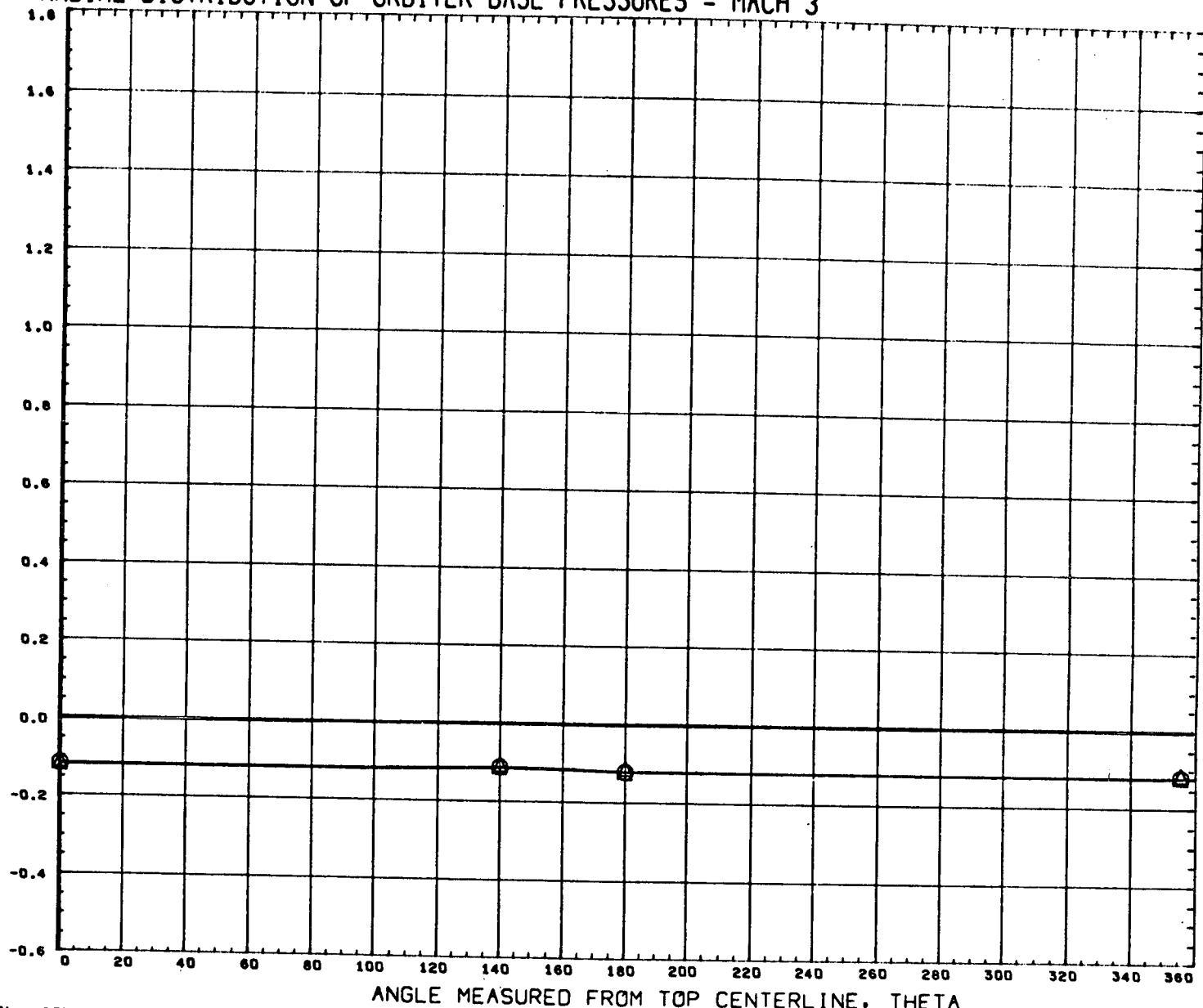
AEDC VA1163 MDAC ORBITER (BASE)

• IT8325 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT, CP



SYMBOL DELTAX X/L DELTAZ
 ○ - 0.390 1.000 0.908
 △ 0.481

| | ALPHAB | MACH |
|--------|--------|--------|
| ALPHAI | 10.004 | 3.000 |
| BSTPOW | 0.000 | ORBPOW |
| | 0.000 | |

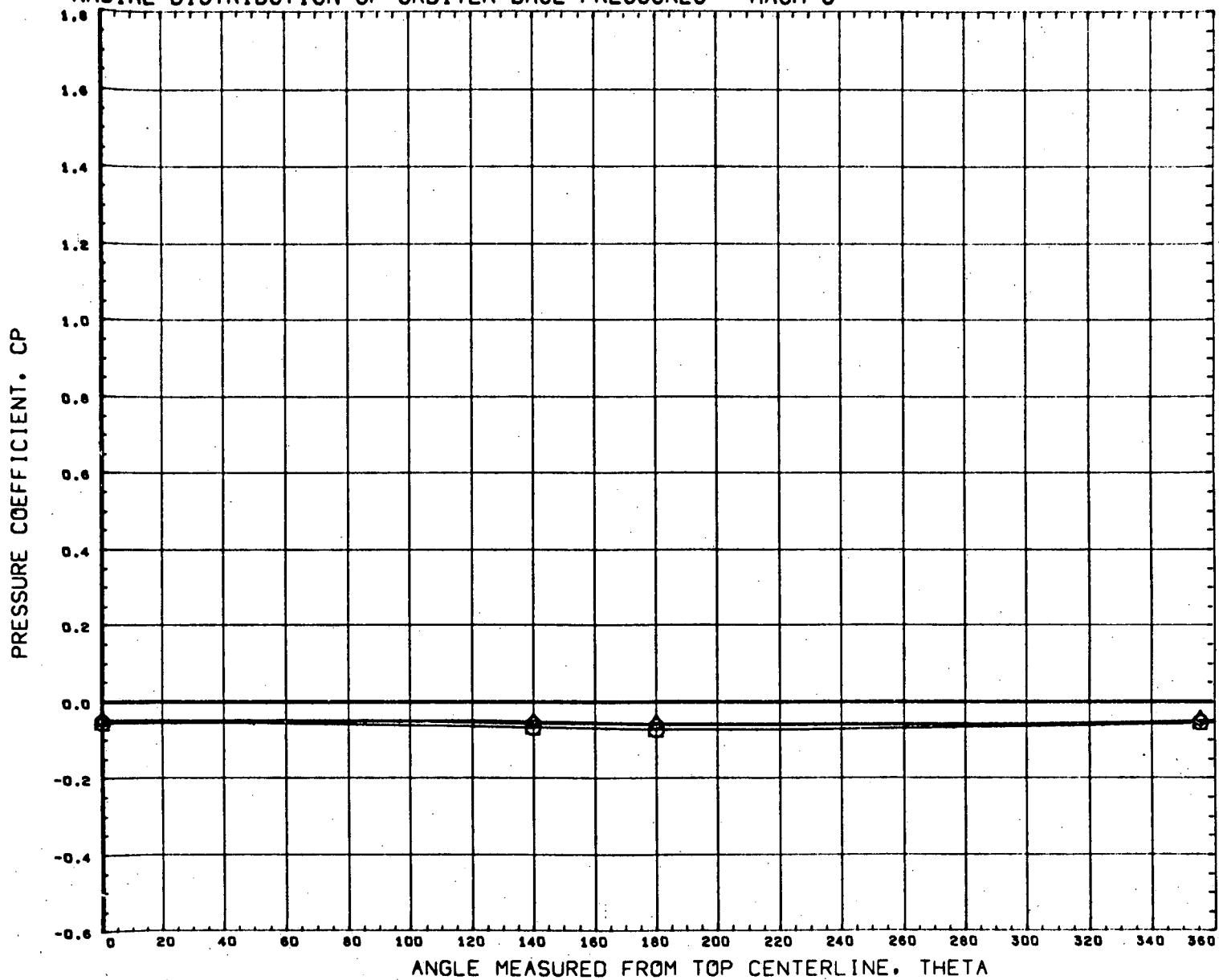
REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

• IT8325 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



| SYMBOL | DELTAX | X/L | DELTAZ |
|------------|--------|-------|--------|
| Δ | 0.040 | 1.000 | 0.105 |
| \diamond | 0.103 | | |
| \diamond | 0.166 | | |

| PARAMETRIC VALUES | | | |
|-------------------|---------|--------|-------|
| ALPHAB | - 9.980 | MACH | 3.000 |
| ALPHAT | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

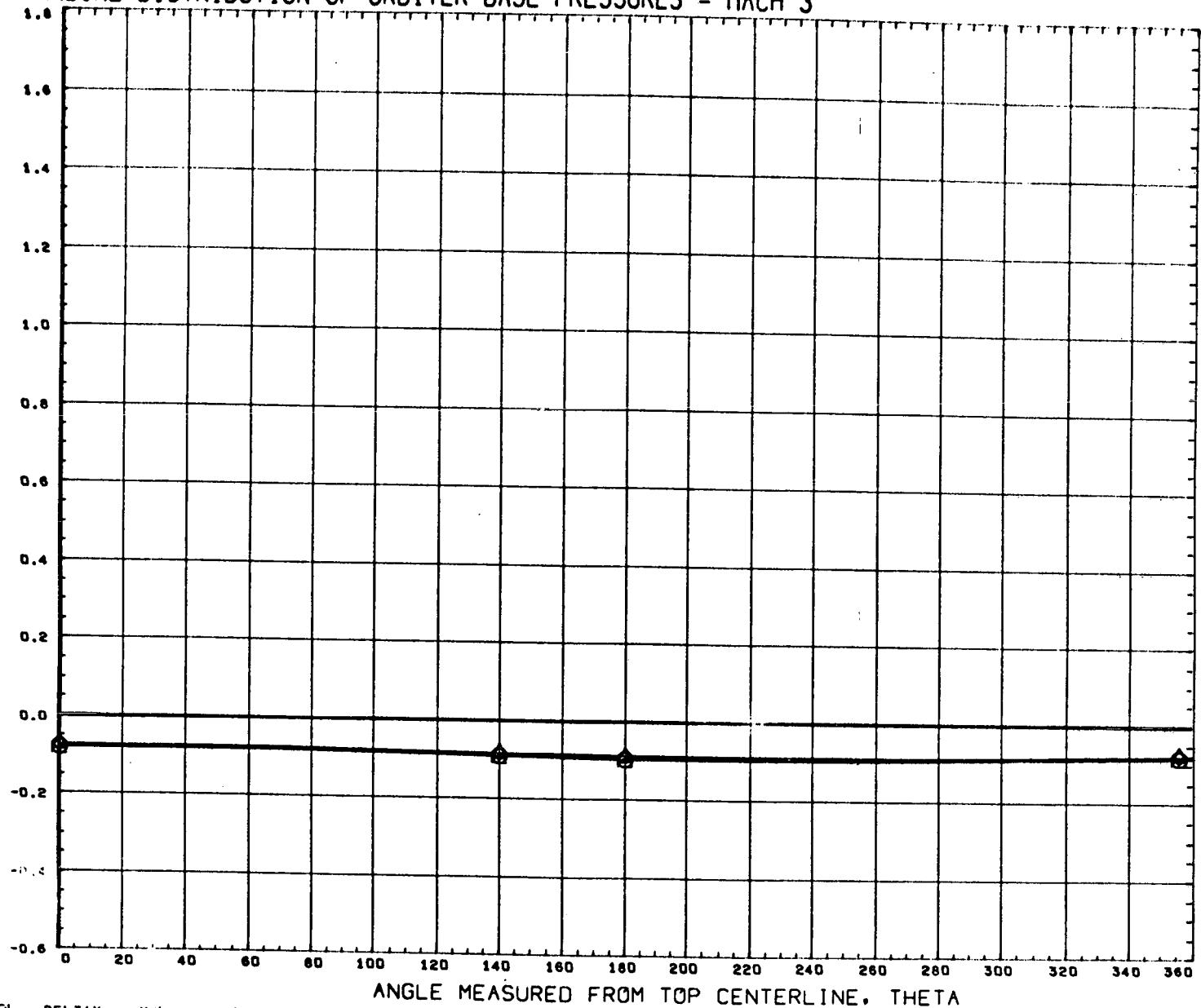
AEDC VA1163 MDAC ORBITER (BASE)

• IT8331 •

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX X/L DELTAZ
 □ 0.038 1.000 0.105
 △ 0.101
 ◇ 0.161

PARAMETRIC VALUES
 ALPHAB = 4.950 MACH 3.000
 ALPHAI = 0.000 ORBPOW 0.000
 BSTPOW 0.000

REFERENCE FILE

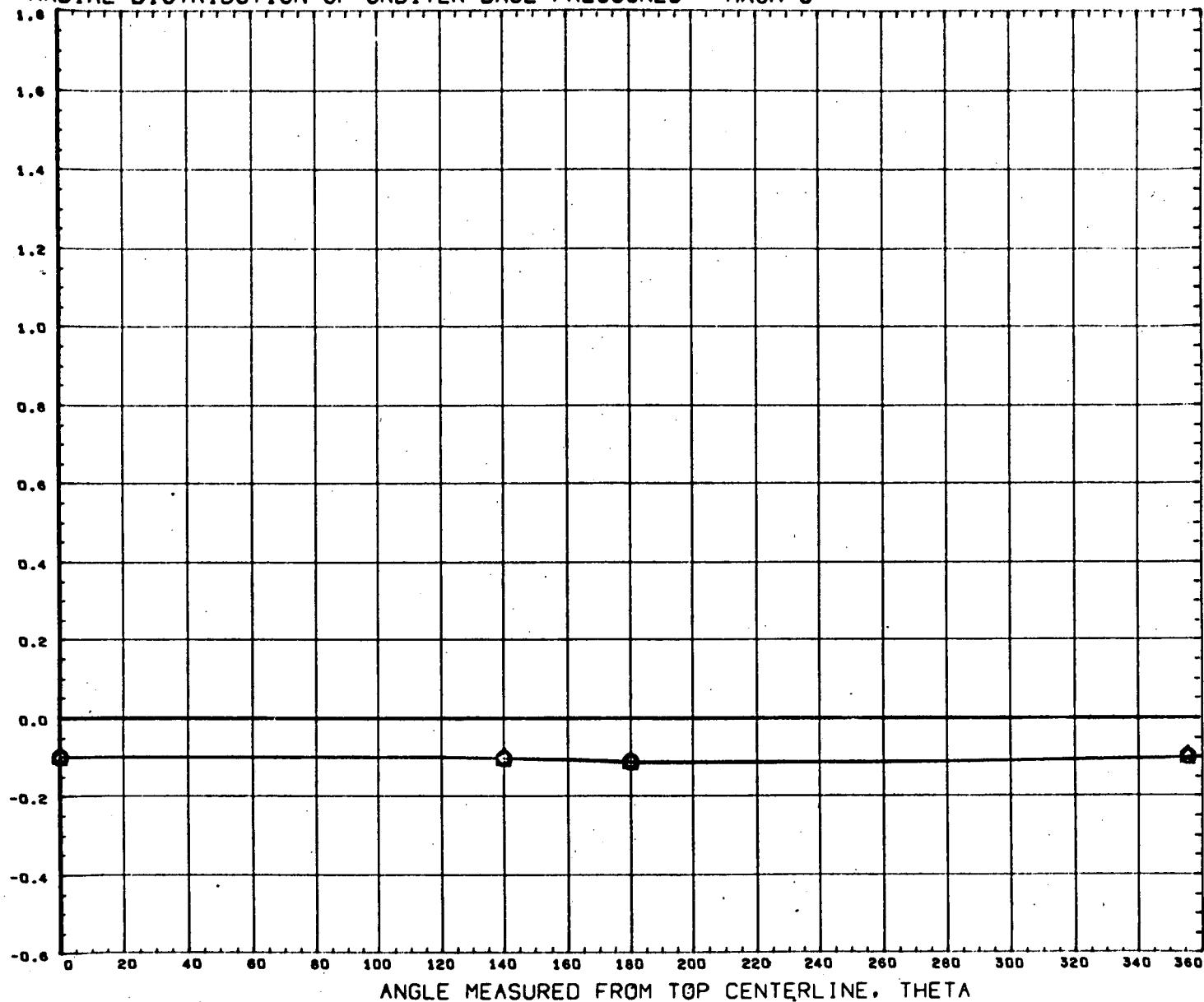
AEDC VA1163 MDAC ORBITER (BASE)

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3

PRESSURE COEFFICIENT. CP



SYMBOL DELTAX X/L DELTAZ
 □ 0.040 1.000 0.105
 △ 0.104
 ◇ 0.167

PARAMETRIC VALUES
 ALPHAB 0.003 MACH 3.000
 ALPHAI 0.000 ORBPOW 0.000
 BSTPOW 0.000

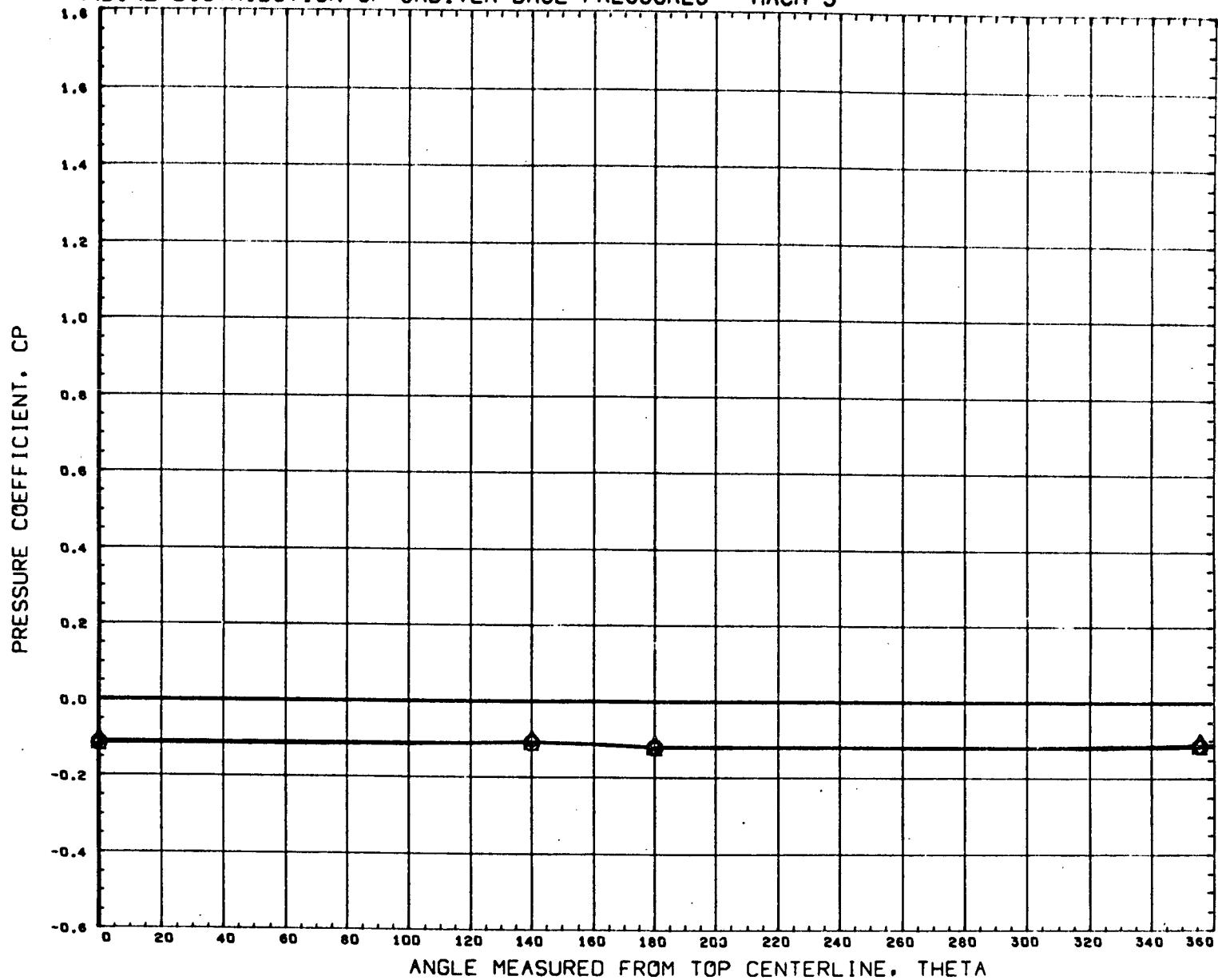
REFERENCE FILE

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



SYMBOL DELTAX X/L DELTAZ

○ 0.038 1.000 0.105

△ 0.099

◊ 0.162

PARAMETRIC VALUES

| | ALPHAB | MACH |
|--------|--------|--------|
| ALPHAI | 5.040 | 3.000 |
| BSTPOW | 0.000 | ORBPOW |
| | 0.000 | |

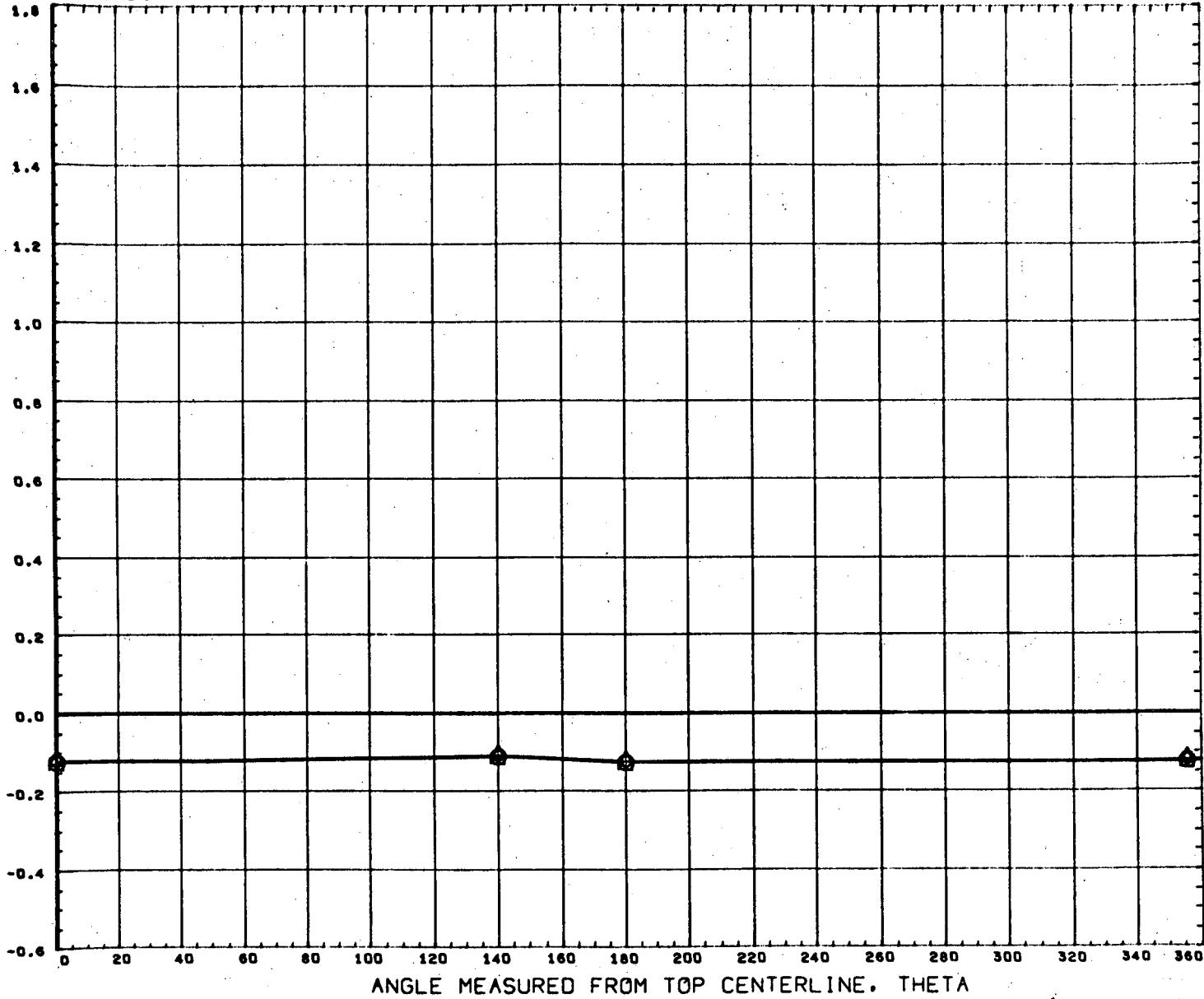
REFERENCE FILE

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RADIAL DISTRIBUTION OF ORBITER BASE PRESSURES - MACH 3



| SYMBOL | DELTAX | X/L | DELTAZ |
|--------|--------|-------|--------|
| ○ | 0.042 | 1.000 | 0.105 |
| △ | 0.104 | | |
| ◊ | 0.165 | | |

| PARAMETRIC VALUES | | | |
|-------------------|--------|--------|-------|
| ALPHAB | 10.000 | MACH | 3.000 |
| ALPHAI | 0.000 | ORBPOW | 0.000 |
| BSTPOW | 0.000 | | |

REFERENCE FILE

AEDC VA1163 MDAC ORBITER (BASE)

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